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- Современные технологии управления организацией;
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OZIQ-OVQAT SANOATINI JOYLASHTIRISH VA RIVOJLANTIRISH ASOSIY OMILLARI

Annotatsiya: *Oziq-ovqat bilan ta'minlanishini, balki iqtisodiy o'sishni, ish o'rinlarini yaratishni va eksport salohiyatini oshirishni ta'minlaydi. O'zbekiston Respublikasida oziq-ovqat sanoatining rivojlanishi va uni samarali joylashtirishda bir qator omillar muhim ahamiyat kasb etadi. Ushbu maqolada oziq-ovqat sanoatini joylashtirish va rivojlantirishga ta'sir ko'rsatadigan asosiy omillarni tahlil qilish maqsad qilingan.*

Kalit so'zlar: *Oziq-ovqat sanoati ,tabiiy resurslar, iqlim sharoiti, transport va infratuzilma, investitsiya, raqobat ,energiya manbalar, kaloriya, prognoz*

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THE MAIN FACTORS OF THE LOCATION AND DEVELOPMENT OF THE FOOD INDUSTRY

Abstract: *Ensures food security, but also economic growth, job creation and export potential. A number of factors are important in the development of the food industry in the Republic of Uzbekistan and its effective deployment. This article aims to analyze the main factors affecting the location and development of the food industry.*

Key words: *Food industry, natural resources, climate conditions, transport and infrastructure, investment, competition, energy sources, calories, forecast*

Oziq-ovqat sanoatining vazifasi Respublika aholisini to'gri va balanslashtirilgan ovqatlanish ratsionini shakllantirish uchun yetarli hajmda va assortimentda xilma-xil oziq-ovqat mahsulotlari bilan ta'minlashga qaratilgan. Mutaxassislarning ta'kidlashicha, inson salomatligi va umrining uzoqligi 70% uning ovqatlanish va hayot tarziga, 20% tibbiy xizmat holatiga va 10% uning hayotiy tug'ma ko'rsatkichlariga bog'liq. Keltirilgan ma'lumotlar inson salomatligining qolati va umrini uzaytirishda oziq - ovqat va uni ishlab chiqaruvchi sanoatning ahamiyati haqida aniq tasavvur beradi. Oziq-ovqat mahsulotlarini aholining faol va sog'lom turmush ehtiyoji uchun zarur miqdorda sotib olish kafolatlangan jismoniy va iqtisodiy imkoniyati – uning yashashi, jamiyatning sotsial barqarorligi va mamlakatda pozitiv demografik holatning asosiy shartidir.

Chet el olimlarining bashorat qilishlariga qaraganda, oziq-ovqat yetishmasligi muammosi yaqin kelajakda dunyoda birinchi navbatdagi dolzarb masalaga aylanadi. BMT prognozi bo‘yicha sayyoramiz aholisining soni 2050 yilda 9 mlrd. kishiga yetadi, bu esa biosfera barqarorligining kritik chegarasidan 4 marta ziyod. Katta yer maydonlarini o‘zgarishi va ishlash yo‘li bilan dunyoda don yetishtirishni yanada kengaytirish imkoniyati cheklangan, bu esa istiqbolda oziq-ovqat tangligining kuchayishiga olib keladi. Aholi oziq - ovqat bilan ta'minlanganligining eng umumlashgan ko‘rsatkichi, FAO tavsiyasi bo‘yicha har bir kishi sutkalik ovqatlanish ratsionining kaloriya miqdori hisoblanadi. Hozirgi davrda oziq - ovqat mahsulotlarini o‘rtacha sutkalik iste'mol qilish. Yevropa Ittifoqi mamlakatlarida 3390 kkal, AQSh da - 3650, Lotin Amerikasida - 2790, rivojlanayotgan Osiyoda - 2650 kkalni tashkil etadi. Sutkalik ovqatlanish ratsioni O‘zbekistonda o‘rtacha 2700 - 2800 kkal. Sutkalik ovqatlanish kaloriyaliligi darajasini oshirish, birinchi navbatda, mamlakat iqtisodiyotini rivojlantirish va xalq farovonligini yuksaltirish bilan bog‘liq. Oziq-ovqat sanoatining faoliyati tarmoq korxonalariga xomashyo yetkazib beruvchi qishloq xo‘jaligi ishlab chiqarishining rivojlanish darajasi bilan belgilanadi. Oziq-ovqat mahsulotlarining miqdori va sifati, uning assortimenta dehqonchilik va chorvachilik mahsulotlarining hajmiga bevosita bog‘liq.

Agrosanoat kompleksi iqtisodiyotning eng muhim tarmoqlaridan biri va mamlakat aholisini oziq-ovqat bilan ta'minlashda asosiy ro’l o‘ynaydi. Mustaqillik yillarida O‘zbekistonda bozor iqtisodiyotining asosiy xususiy mulkchilik ustuvorligini amalda ta'minlash , agrosanoat kompleksi faoliyatini takomillashtirish va yanada rivojlantirish bo‘yicha mustahkam qonuniy asos yaratildi. Mamlakat iqtisodiyotini barkaror rivojlantirish, yangi ish joylari yaratish va aholi daromadlarini oshirishning xuquqiy kafolatlari va qulay faoliyat ko‘rsatish muhiti shakllantarildi.Buning natijasi sifatida quyidagi misolni keltirish mumkin.

Ushbu amalga oshirilayotgan tadqiqotimiz doirasida oziq-ovqat sanoatini rivojlantirish bo‘yicha mahalliy olimlarimizning tadqiqotlari o‘rganib chiqildi.Jumladan N.M. Ziyavitdinovaning tadqiqotlarida oziq-ovqat sanoati korxonalarida bozor strategiyasini shakllantirishda, ularni rivojlantirish yo‘nalishlarini ishlab chiqishda va tarmoq boshqaruvining tashkiliy tuzilishi takomillashtirilgan. Shuningdek,O‘zbekiston Respublikasi Statistika qo‘mitasi. (2022). "Oziq-ovqat sanoati rivojlanishining asosiy yo‘nalishlari" oziq-ovqat sanoati haqida ma’lumot berilgan. Mazkur tadqiqot ishida yuqoridagi ishlardan farqli o‘laroq oziq-ovqat sanoatini joylashtirish va rivojlantirish xususida so‘z yuritildi.

Oziq-ovqat sanoatini joylashtirishning muvaffaqiyati, asosan, tabiiy resurslarning mavjudligi, iqlim sharoiti va ishlab chiqarish imkoniyatlariga bog‘liqdir. O‘zbekistonda oziq-ovqat sanoatini joylashtirishda quyidagi asosiy omillar muhim rol o‘ynaydi:

1. Tabiiy resurslar: Oziq-ovqat sanoatining rivojlanishiga tabiiy resurslar bevosita ta’sir qiladi. Mamlakatda paxta, bug‘doy, guruch, meva va sabzavotlar kabi qishloq xo‘jaligi mahsulotlarining boy zaxiralari mavjud. Ushbu resurslardan samarali

foydalanish sanoatni joylashtirish va rivojlantirishda muhim rol oʻynaydi. Misol uchun, qishloq xoʻjaligi mahsulotlarini qayta ishlash zavodlari meva-sabzavotlar yetishtiriladigan hududlarda joylashgan boʻlishi kerak.
2. Iqlim sharoiti: Oʻzbekistonning iqlimi oziq-ovqat sanoatining joylashishi uchun qulay hisoblanadi. Issiq iqlim, paxta va boshqa qishloq xoʻjaligi mahsulotlari uchun ideal sharoitlar yaratadi. Bu, oʻz navbatida, oziq-ovqat sanoati tarmoqlarining rivojlanishiga yordam beradi.
3. Transport va infratuzilma: Oziq-ovqat sanoatini joylashtirishda transport va infratuzilmaning rivojlanishi juda muhim. Yaxshi transport tarmogʻi oziq-ovqat mahsulotlarini ishlab chiqarish joylaridan isteʼmol bozorlariga tez va samarali yetkazib berishga yordam beradi. Oʻzbekistonning temir yoʻl, avtomobil yoʻllari va logistika infratuzilmasi oziq-ovqat sanoatini rivojlantirishda katta ahamiyatga ega.
4. Energiya manbalari: Oziq-ovqat sanoati uchun zarur boʻlgan energiya manbalari ishlab chiqarish joylarida mavjud boʻlishi kerak. Oʻzbekistonda energiya resurslari, xususan, gaz va elektr energiyasi, sanoat tarmoqlarini joylashtirishda muhim omil hisoblanadi.

Oziq-ovqat sanoatini rivojlantirishda bir qator ijtimoiy, iqtisodiy va texnologik omillar taʼsir koʻrsatadi. Oziq-ovqat sanoatining samarali rivojlanishi uchun quyidagi omillar zarur:

- Investitsiyalar va moliyaviy qoʻllab-quvvatlash: Oziq-ovqat sanoatini rivojlantirish uchun investitsiyalarni jalb qilish va moliyaviy qoʻllab-quvvatlash juda muhim. Mamlakatda sanoatni modernizatsiya qilish, yangi texnologiyalarni joriy etish va ishlab chiqarish quvvatlarini oshirish uchun davlat tomonidan moliyaviy ragʻbatlantirishlar va imtiyozlar taqdim etilmoqda.
- Texnologik innovatsiyalar: Zamonaviy texnologiyalarni ishlab chiqarish jarayonlariga joriy etish oziq-ovqat sanoatining samaradorligini oshirishga yordam beradi. Yangi texnologiyalar mahsulot sifatini yaxshilash, ishlab chiqarish xarajatlarini qisqartirish va yangi mahsulotlar ishlab chiqarishga imkon yaratadi.
- Ishlab chiqarishning diversifikatsiyasi: Oziq-ovqat sanoatining rivojlanishi ishlab chiqarishning diversifikatsiyasiga bogʻliq. Faqatgina qishloq xoʻjaligi mahsulotlarini qayta ishlashdan tashqari, yangi turdagi oziq-ovqat mahsulotlarini ishlab chiqarish, shu jumladan organik va sogʻlom oziq-ovqatlarni ishlab chiqarishga eʼtibor qaratish kerak.
- Mehnat resurslari va malakali kadrlar: Sanoatni rivojlantirishda malakali ishchi kuchi va menejerlar katta ahamiyatga ega. Oziq-ovqat sanoatida ishlovchi kadrlarni tayyorlash, ularning malakasini oshirish va ilmiy-tadqiqot ishlarini olib borish sanoatning rivojlanishiga ijobiy taʼsir qiladi.
- Raqobatbardoshlik: Oziq-ovqat sanoatining rivojlanishida raqobatbardoshlikni taʼminlash muhimdir. Sanoatni global bozorlar bilan bogʻlash, xalqaro sifat standartlariga mos mahsulotlar ishlab chiqarish va eksport imkoniyatlarini kengaytirish raqobatbardosh bozorni yaratadi.

Oziq-ovqat sanoatini joylashtirish va rivojlantirishda tabiiy resurslar, iqlim sharoiti, infratuzilma, investitsiyalar va texnologik innovatsiyalar muhim omillar hisoblanadi. Mamlakatning oziq-ovqat sanoatining samarali rivojlanishi uchun bu omillarni hisobga olib, to‘g‘ri strategiyalarni ishlab chiqish zarur. Shuningdek, innovatsiyalar va yangi texnologiyalarni joriy etish, ishchi kuchining malakasini oshirish va raqobatbardosh mahsulotlar ishlab chiqarish oziq-ovqat sanoatining kelajakdagi muvaffaqiyatini ta’minlaydi.

Foydalanilgan adabiyotlar ro‘yxati:

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XORIJIY INVESTITSIYALAR IQTISODIY O'SISHNING MUHIM MANBAIDIR

Annotatsiya: *maqolada xorijiy investitsiyalar iqtisodiy o'sishning muhim manbai bo'lib, undan investitsiya sub'ektlari va ob'ektlari birdek manfaatdor hisoblanishi aks ettirilgan.*

Kalit so'zlar: *xorijiy investitsiyalar, iqtisodiy o'sishn, kapital, qimmatbaho qog'ozlar, investitsiyaviy jozibadorlik, iInvestitsiya muhiti.*

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FOREIGN INVESTMENT IS AN IMPORTANT SOURCE OF ECONOMIC GROWTH

Abstract: *The article reflects that foreign investment is an important source of economic growth, and that subjects and objects of investment are equally interested in them.*

Key words: *foreign investment, economic growth, capital, securities, investment attractiveness, investment environment.*

Investitsiyalar barcha xalqaro operatsiyalarni amalga oshirishda kichik korxonalar va mikrofirmalar uchun muhim ahamiyatga ega. Xorijiy investitsiyalarga asosan, moliyaviy muammolarni yechish uchun murojaat qilinadi. Xorijiy korporatsiyalarning moliyaviy bo'limlari mablag'lardan qisqa muddatli investitsiyalar qatorida, yuqori foyda olish maqsadida foydalanish moddiy manfaatdorlikni belgilashga olib keladi. Bunday investitsiyalar, ko'pincha, xususiy tadbirkorlar kapitaliga asoslangan, ba'zida esa, o'z qimmatbaho qog'ozlarini chiqaradi va xorijiy qimmatbaho qog'ozlarini sotib oladi.

O'zbekiston xorijiy investorlar bilan tengma-teng iqtisodiy aloqalar olib borish asosida sherikchilik munosabatlarini olib boradi. Har qanday investitsiyalarning mamlakatimizga kirib kelishiga yo'l qo'yilmaydi. Agar kirib kelayotgan investitsiyalar mamlakatimiz iqtisodiyotiga uning rivojlanishiga keng imkoniyatlar yaratsa, bunday xorijiy investitsiyalar yurtimizga birinchilar qatorida kirib keladi. Jahon tajribasi shuni ko'rsatmoqdaki, qulay investitsion iqlimni shakllantirmasdan va xorijiy investitsiyalarni milliy iqtisodiyotga faol jalb etmasdan turib, bozor iqtisodiyotiga o'tayotgan mamlakatlar jahon iqtisodiy hamjamiyatiga muvaffaqiyatli integratsiyalasha olmaydi.

O‘zbekiston Respublikasini rivojlantirishning beshta ustuvor yo‘nalishi bo‘yicha Harakatlar strategiyasida innovatsiyalarni jadal rivojlantirishga muhim ahamiyat berilib, o‘rta muddatli istiqbolda fan sohasidagi davlat siyosatining maqsadli vazifalari va ustuvor yo‘nalishlaridan biri sifatida “ilmiy-tadqiqot va innovatsiya faoliyatini rag‘batlantirish, ilmiy va innovatsiya yutuqlarini amaliyotga joriy etishning samarali mexanizmlarini yaratish, oliy o‘quv yurtlari va ilmiy-tadqiqot institutlari huzurida ixtisoslashtirilgan ilmiy-eksperimental laboratoriyalar, yuqori texnologiya markazlari va texnoparklarni tashkil etish” belgilandi. Bu esa, ilmiy-tadqiqot va tajriba-konstruktorlik ishlanmalarini moliyalashtirish, innovatsion faoliyatni iqtisodiy va moliyaviy rag‘batlantirish masalalariga alohida e’tibor qaratish zarurligini ko‘rsatadi.

Shu nuqtai nazardan, Yevropa tiklanish va taraqqiyot bankining ko‘magi bilan tuzilgan, Respublikada faoliyat yuritayotgan investorlar bilan bevosita muloqotni ta’minlaydigan O‘zbekiston Respublikasi Prezidenti huzuridagi Xorijiy investorlar kengashining rolini ta’kidlash muhim ahamiyatga ega.

Xususiy investitsiyalarni faollashtirish uchun tadbirkorlik faoliyatini erkinlashtirish talab etiladi. Biznes bilan doimiy muloqot, muayyan sektorlarning rivojlanishiga to‘sqinlik qiladigan to‘siqlarni aniqlash va yengib o‘tish bo‘yicha astoydil ish olib borish kerak. Shu munosabat bilan quyidagi yo‘nalishlar bo‘yicha faol ish olib borilmoqda.

Birinchidan, iqtisodiy o‘sishning bir maromdagi yuqori va barqaror sur’atlarini saqlab qolish uchun mamlakat iqtisodiyotining barqaror va raqobatbardosh, bank tizimi aktivlarining katta qismi xususiy investorlar qo‘lida bo‘lgan modelini shakllantirish zarur.

Ikkinchidan, investitsiyaviy jozibadorlikni oshirish va barqaror iqtisodiy o‘sishning asosiy omillaridan biri bo‘lgan infratuzilmaga yo‘naltirilgan investitsiyalarining jadal o‘sishini ta’minlash maqsadida davlat-xususiy sheriklik va loyihalarni moliyalashtirish vositalarini rivojlantirish orqali investitsiyaviy faoliyatni rag‘batlantirish ham faol tarzda olib borilmoqda.

Uchinchidan, raqamlashtirish va davlat xizmatlarini masofaviy taqdim etish orqali investitsiya loyihalarini amalga oshirishda byurokratik to‘siqlar va cheklovlarni to‘liq bartaraf etish uchun investorlar va davlat o‘rtasidagi munosabatlar optimallashtirilmoqda. Shaffoflikni maksimal darajada ta’minlash va korrupsiyaning oldini olish uchun xorijiy investorlarning murojaatlari va so‘rovlari bilan ishlashni tashkil etish sifati yaxshilanmoqda.

To‘rtinchidan, ish kuchi va kapitalning iqtisodiyotning qonuniy sektorlaridan yashirin iqtisodiyotga oqib ketishiga olib keladigan tranzaksiya xarajatlarining kamayishi kuzatilmoqda.

Beshinchidan, kelgusida texnologik yutuqlarga erishish nuqtasiga aylanishi va keyingi 20-30 yil davomida mamlakat ishlab chiqarish quvvatlarini rivojlanishi uchun zamin yaratishi mumkin bo‘lgan O‘zbekistonning eng istiqbolli sohalariga yo‘naltirilgan investitsiya siyosati strategiyasi ishlab chiqilmoqda

Yurtboshimiz Shavkat Mirziyoyev tomonidan qabul qilingan “2022-2026-yillarga mo‘ljallangan yangi O‘zbekistonning taraqqiyot strategiyasi to‘g‘risida”gi Farmonida olib borilayotgan islohotlar samarasini yanada oshirish, davlat va jamiyatning har tomonlama va jadal rivojlanishi uchun shart sharoitlar yaratish, mamlakatimizda adolatli ijtimoiy siyosat yuritish, ta’lim sifatini oshirish, mamlakatimizda investitsiya muhitini yanada yaxshilash va uning jozibadorligini oshirish kabi bir qator vazifalar belgilab qo‘yilgan. Ushbu Taraqqiyot strategiyasida milliy iqtisodiyotni jadal rivojlantirish va yuqori o‘sish sur’atlarini ta’minlashning asosiy maqsadlaridanbiri bu –mamlakatda investitsiya mihitini yanada yaxshilash va uning jozibadorligini oshirishdan iborat.

Mamlakatimizda xorijiy investitsiyalarni jalb qilish uchun qulay sharoitlar yaratilgan bo’lib, ular quvidagilar:

–siyosiy va iqtisodiy barqarorlik;
–investitsiya faoliyatini qo’llab-quvvatlovchi me’yoriy-huquqiy asos;
–rivojlangan mamlakatlarga qaraganda arzon ishchi kuchi;
–qulay investitsiyaviymuhit;
–boy mineral xom ashyo bazasi;
–qulay geografik joylashuv;
–arzon iqtisodiy resurslar;
–bozorning to‘yinmaganligi;
–yashash uchun yaratilgan qulayliklar

Xorijiy investitsiyalar — chet el investorlari tomonidan yuqori darajada daromad olish, samaraga erishish maqsadida mutloq boshqa davlat iqtisodiyotining, tadbirkorlik va boshqa faoliyatlariga safarbar etadigan barcha **mulkiy, moliyaviy, intellektual boyliklar**idir. Chet el investitsiyalari ichki investitsiyalardan farqli holda tashqi moliyalashtirish manbaiga kiradi. Ular milliy iqtisodiyotga chetdan, ularning kelishini rag‘batlantirgan holda jalb qilinadi. Lekin chet el kapitalini jalb qilishning hamma shakllari ha moliyalashtirishning tashqi manbai bulmasligi mumkin. Bu birinchi navbatda foiz to'lovlari bilan qaytarishni talab etadigan kreditlar va qarzlarga taaluqli. Chunki, chet el kreditlari va xalqaro moliya institutlari qarzlari ma’lum vaqt o‘tgach asosiy qarz bilan birga belgilangan foizlarining qaytarilishini talalb etadi. Chetdan jalb etiladigan xorijiy investitsiyalar bilan chet eldan kiritiladigan kreditlarninig o‘ziga xos farqlari mavjuddir. Bu borada xorijiy investitsiyalar risklar doirasi bilan chet el kreditlari risklari kengligi farqlanadi.

Shuningdek, tadbirkorlarni va investitsiya loyihalari tashabbuskorlarini amaliy qo‘llab-quvvatlashga katta e’tibor qaratilmoqda. Ushbu yo‘nalishdagi eng yorqin misol - bu 2024 yilda tuzilgan eksport va investitsiyalarni rivojlantirish masalalari bo‘yicha Hukumat komissiyasining faoliyati bo‘lib, uning vazifalariga tadbirkorlar va eksportchilar bilan yaqin hamkorlik qilish, turli hil vaziyatlar tufayli yuzaga kelgan cheklovlar bilan bog‘liq muammolarni taxlil qilish, shuningdek, har bir tadbirkorlik subyektining muammosini hal qilishda individual yondashuv asosida tezkor va samarali yechimlarni ishlab chiqish va amalga oshirish kiradi.

Xulosa qilib aytganda, xorijiy investitsiyalar iqtisodiy o‘sishning muhim manbai bo‘lib, undan investitsiya sub’ektlari va ob’ektlari birdek manfaatdor hisoblanadi. Har qanday investor uchun mablag‘larni investitsiya qilishning asosiy maqsad -foydani maksimal darajada oshirish bo‘lganligi sababli, xorijiy investorlar ma’lum bir mamlakatga sarmoya kiritish to‘g‘risida qaror qabul qilishda uning investitsion salohiyatini hisobga oladilar, investitsion jozibadorligini baholaydilar va investitsiya muhitini o‘rganadilar.

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ETNOSPORT TURLARINI OMMALASHTIRISH VA RIVOJLANTIRISHDA HARAKATLI O‘YINLARNI O`TKAZISH ,YOSH SPORTCHILARGA SYUJETLI OBRAZLARNING AHAMIYATI

Annotatsiya: *O‘quv-mashg’ulotlari jarayonida etnosport harakatli o’yinlarining qo’llanilishi mamlakatimizda milliy sport turlari va xalq o’yinlarini (etnosport) targ’ib qilish va ommalashtirish, bolalar va o’smirlarni ularga keng jalb qilish, xalqaro aloqalarni kuchaytirish maqsadida, shuningdek, O’zbekiston Respublikasi Prezidentining 2022-yil 25-maydagi PQ-259-son qaroriga muvofiq va adabiyotlar taxliliga tayangan holda tadqiqotning maqsadi va vazifalarini belgilab olishga imkon yaratilgan. Mashg’ulotlar natijalari shuni ko’rsatadiki, o’quv-mashg’ulotlar jarayonida harakatli o’yinlar usullarining kam qo’llanilayotganligi bolalarda sport turiga bo’lgan qiziqish (motivatsiyaning) so’nayotganligidan darak berishi. Shu bilan birgalikda, boshlang’ich tayyorgarlik bosqichida shug’ullanuvchi yosh sportchilarning sportga bo’lgan motivatsiyasini rivojlantirishda harakatli o’yinlarni saralab samaradorligini pedagogik tajribada asoslab, murabbiylar amaliyotiga tavsiya va takliflar berish hozirgi kunda eng dolzarb vazifalardan biri bo’lib turganligi qayd etilgan.*

Kalit so‘zlar: *Milliy sport, etnosprt, yosh sportchilar, harakatli o‘yinlar, syujetli obraz, jismoniy sifatlar, intelektual, salomatlik.*

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THE IMPORTANCE OF HOLDING ACTION GAMES AND PLOT-BASED IMAGES FOR YOUNG ATHLETES IN THE POPULARIZATION AND DEVELOPMENT OF ETHNOSPORTS

Abstract: *The use of ethno-sports action games in the course of training is the promotion and popularization of national sports and folk games (ethno-sports) in our country, children and teenagers in order to attract them widely, to strengthen international relations, as well as in accordance with the decision of the President of the Republic of Uzbekistan No. PQ-259 of May 25, 2022 and based on the analysis of literature it was possible to determine the goals and objectives of the research. The results of the trainings show that the lack of use of mobile game methods in the training process reduces children's interest in sports (motivation). to indicate that it is fading. At the same time, the effectiveness of action games in the development of the motivation of young athletes engaged in sports at the stage of* *initial training was tested in the pedagogical experience. it is noted that giving recommendations and suggestions to the practice of coaches is one of the most urgent tasks.*

Keywords: *National sports, ethnic sports, young athletes, action games, plot image, physical qualities, intellectual, health.*

KIRISH: Mamlakatimizda milliy sport turlari va xalq oʻyinlarini (etnosport) targʻib qilish va ommalashtirish, bolalar va oʻsmirlarni ularga keng jalb qilish, xalqaro aloqalarni kuchaytirish maqsadida, shuningdek, Oʻzbekiston Respublikasi Prezidentining 2022-yil 25-maydagi "Etnosport turlarini ommalashtirish va rivojlantirish chora-tadbirlari toʻgʻrisida"gi PQ-259-sonli qarori ushbu ilmiy izlanishga asos sifatida muhumligini oʻzida aks etgan. Jumladan yosh sportchilarni sportga va mustaqil hayotga tayyorlashda mashgʻulot tizimini takomillashtirish bilan birga yoshga xos xususiyatlariniham hisobga olish kerakligi mavzuni dolzarbligini tasdiqlaydi.

ADABIYOTLAR TAHLILI: Kichik yoshdagi bolalarning organizmi rivojlanish jarayonida organlar tizimi va butun organizmda sodir bo'ladigan o'zgarishlarni o'ziga xos yosh xususiyatlarini hisobga olgan holda o'rganib bunda bola organizmi katta odam organizmidan tubdan farq qilishi, bola organizmi faqat katta odam qolipi bo'lmay, balki hajmi, fiziologik xususiyatlari va tashqi muhitga moslashishi bilan farq qilinishi olimlar tomonidan yetarlicha o'rganilgan. Yosh sportchilarning boshlang'ich tayyorgarlik bosqichida to'laqonli jismoniy rivojlanishi va ularning jismoniy sifatlarini tarbiyalash, sport turining dastlabki texnik harakatlari elementlarini o'zlashtirish poydevori 8-12 yoshlar oralig'iga to'g'ri keladi. Olimlarning fikriga ko'ra, shu bosqichda bolalarda zarur harakat ko'nikmalari ayniqsa yaxshi o'zlashtirilib, mustahkam rivojlanishi ilmiy tadqiqotlarda asoslanib berilgan.

NATIJALAR: Dastlabki tayyorgarlik bosqichi o'quv-mashg'ulotlari jarayonida etnosport harakatli o'yinlarining qo'llanilishi mamlakatimizda milliy sport turlari va xalq o'yinlarini (etnosport) targ'ib qilish va ommalashtirish, bolalar va o'smirlarni ularga keng jalb qilish, xalqaro aloqalarni kuchaytirish maqsadida, shuningdek, O'zbekiston Respublikasi Prezidentining 2022-yil 25-maydagi PQ-259-son qaroriga muvofiq va adabiyotlar taxliliga tayangan holda tadqiqotning maqsadi va vazifalarini belgilab olishga imkon yaratdi. Bu vazifalar qatoriga tezkorlik, kuch, chidamlilik va egiluvchanlik jismoniy qobiliyatlarni rivojlantirishda samarali yordam beruvchi etnosport harakatli o'yinlarni saralab olish, jismoniy va funktsional tayyorgarligining oshishiga, hamda to'g'ri va aniq texnik usullarning samarali o'sishida ularning qo'llanish shiddati, hajmi va me'yorlarini aniqlash shuningdek metodikasini ilmiy tadqiqot labaratoriyasida ishlab chiqish natijasida uning samaradorligini amaliyotga joriy etish bolalarning mustaqil hayotga sport misolida tayyorlashda syujetli oʻbrazlarning ahamiyati yuqoriligi taʻsir darajasining oʻrnini belgilaydi.

MUHOKAMA: Oʻyin shaxsning tarbiyalash, rivojlantirish ta'lim berish xususiyatlariga ega. O‘yinning mavjud xuxusiyatlari tufayli o‘yinlar bolaning rivojlanishida muhim ahamiyat kasb etib kelmoqda. Bevosita o‘yinlar bolalarda idrok, sezgi, xotira, tafakkur,nutqni rivojlantirishga yordam berish orqali ularni ma’naviy axloqiy ,aqliy ,jismoniy, va estetik jihatdan tarbiyalashga xizmat qiladi. O‘yin maktabgacha yoshdagi bolalar faoliyatining asosiy shakli bo‘lib hisoblanadi. O‘yin orqali bola shaxs bo‘lib shakllanadi. O‘yin bolaning kelajakdagi o‘quv mehnat faoliyati, kishilarga munosabatning qay darajada shakllanishini belgilab beradi.

O‘yin bolaning jismoniy rivojlanishi, Yosh sportchilarning ta’lim-tarbiya ishida bolalarni aqliy, axloqiy mehnat va estetik jihatdan tarbiyalashda katta ahamiyatga ega. Sport maktablarida o‘tkaziladigan har qanday ta’limiy faoliyatni didaktik o‘yinlar orqali tashkil etish, murabbiy boshchiligida qo‘llanilayotgan o‘yin usullari umumiy mashg‘ulotdan maxsus mashg‘ulotga undan musobaqaga tayyorlov guruhlariga o‘tish asosida o‘zgarib, murakkablashib boradi. Bu jarayonda didaktik o‘yinlarni, ta’lim-tarbiya usullaridan foydalangan holda qo‘llash pedagogning kreativ kompetentligi va mahorati darajasiga bog‘liq holda tarkib topib boradi.

8-12 yoshdagi bolalarni nutq o‘stirish faoliyatlari asosida tafakkurini rivojlantirish birnecha bosqichda amalga oshiriladi. Masalan: narsalar, hodisa yoki jarayonlarni tabiiy holatda namoyish qilish bolalar tafakkurini rivojlantirishda didaktik samara beradi. Biroq, bunday namoyishni amalga oshirish har doim ham mumkin bo‘lavermaydi. Shu sababli, murabbiylar tabiiy predmetlarni namoyish qilishda sun’iy muhitga murojaat qilishadi (masalan, hayvonlar bilan “Hayvonot bog‘ida”, turli ko`kat o`simliklar bilan “Issiqxonada”, sabzavotlar bilan “Dalada”, mevalar bilan “Bog‘da” nomli suyjetli suratlar orqali tanishish) yoki sun’iy ravishda yaratilgan obyektlar (maket, model, mulyaj va boshqalar)dan foydaniladi. Mazkur jarayon texnologik ta’lim tizimining yuqori darajali

imkoniyatlarini ochib beradi. Mashg’ulotlar jarayonida tafakkurni rivollantirish usuliyoti ilmiy pedagogik didaktik shart-sharoitlar vositalar yig’indisidan iborat. Pedagogik tizim subyektlari hisoblangan tarbiyachi, tarbiyalanuvchi, ta’lim maqsadi, mazmuni, didaktik jarayonlar hamda tashkiliy shakllari yaxlit bir model asosida tashkil etilishini ifodalaydi. Mazkur modul asosiy didaktik elementlar tizimi: o‘qitish maqsadi, yosh sportchilar jamoasi, murabbiy (murabbiyining mashg‘ulot jarayoniga kreativ yondashuvi, faoliyatning qurilishi), didaktik qonuniyatlari, didaktik tamoyilla didaktik shart sharoitlar, o‘zlashtirish natijalari, o‘yinli ta`lim jarayoning o‘quv metodik tuzilishidan iborat. Murabbiyning ijodkorligi didaktik o’yinlarni tashkil qilish jarayonida muhimdir. Chunki ularning ijodkorligi pedagogik voqelikni tez o‘zlashtirishlari, unga nisbatan kreativ yondashishlarini ta’minlaydi. Didaktik o‘yinlar asosida faoliyatlarning o‘tkazilishi bolalarning o‘zlari orasida, tarbiyachilar va atrof-muhit bilan o‘zaro birgalikdagi harakati yotadigan interfaol o‘qitish metodlari istiqbolini aks ettiradi. Didaktik o‘yinlar bilan bir qatorda harakatli o‘yinlarham maktabgacha yoshdagi bolalar nutqini o‘stirish va tafakkurini rivojlantirishda muhim pedagogik ahamiyat kasb etadi. Qadimdan o‘yin odam hayotining zarur qismi bo‘lib kelgan. Chunki u yoqimli jismoniy yuklamani yetarli darajada beradi, munosabatda bo‘lish talablarini qoniqtiradi, tarbiyalaydi hamda tashqaridan ma’lumot olish imkoniyatini yaratadi, shu jumladan ham ko‘ngilochar dam olish holatini va kayfiyatini yaxshilaydi.Psixologiyadan bizga ma`lumki, bolalar faoliyatining asosini o`yin tashkil etadi. Ular o`z hayot tajribalarini kun davomida ko`rgan kechiganlarini o`yin tarzda namoish etadilar. O`yilar orqali ta`lim oladilar, rivojlanadilar. Bizga ma`lumki,

o‘yin bolalarda shodlik, quvonch, tabbasumni ta’minlaydi, bolaning ijobiy xislatlarini shakllanishiga, ochilishiga ijobiy ta’sir etadi, bolalar jismoniy kuchini va qobiliyatlarini rivojlantiradi. Eng avvalo o‘yin holatini har doim o‘zgarib turishi va harakat jarayonida bola o‘zini kuchliligi bilan to‘satdan kelib chiqadigan holatdan mustaqil chiqib ketishi,o‘z kuchini o‘z tezkorligini, kuch va chidamliligini ko‘rsatishi, o‘rtoqlari bilan hamkorlikda bo‘lishni maqsad qilib qo‘yishi bilan bolalarni o‘ziga rom qiladi. Tadqiqotlar jarayonida shu narsa ma’lum bo’ldiki ijtimoiy tasavvur qilingan o’yin rivojlantirishning barcha sohalariga ijobiy ta’sir ko’rsatadi.

Syujetli –rolli o’yin davomida bolalar :

-turli xil narsalarni o’zgartirib ramziy tafakkurdan foydalanishadi (qog`ozlar

pulga aylanadi, quti uyga aylanadi);

-turli kasb egalarining harakatlari va fikrlarini takrorlashni talab qiladigan rollarni bajarishadi va qo’llab quvvatlashadi (sartarosh, shifokor, quruvchi, oshpaz, sotuvchi);

-rollar o‘rtasidagi munosabatni va ular o‘zaro qanday munosabatda bo‘lishini anglaydilar;

Syujetli-rolli o’yinlarda bolalar o’zlari bilgan boshdan his qilgan kechinmalarga tayanadi hamda ushbu tajriba asosida qandaydir yangilik yaratishadi.Syujetli–rolli o’yin–bu juda kichik yoshdagi bolalar murakkab xulq-atvor hamda fuqarolik va ma’naviy kopetensiyalarni egallashga qanchalik tayyor ekanliklarini ko’rsatuvchi ko’p qirrali jarayondir.

Sport turi bilan shug’ullanish davomiyligi va bu yo’nalishda yuqori ko’rsatgichlarga erishish shaxsning faolligi bilan belgilanib, uning asosida esa aynan motivatsiya yotadi. O’tkazilgan mashg’ulotlar natijalari shuni ko’rsatdiki, o’quv-mashg’ulotlar jarayonida harakatli o’yinlar usullarining kam qo’llanilayotganligi bolalarda sport turiga bo’lgan qiziqish (motivatsiyaning) so’nayotganligidan darak beradi. Shu bilan birgalikda, boshlang’ich tayyorgarlik bosqichida shug’ullanuvchi yosh sportchilarning sportga bo’lgan motivatsiyasini rivojlantirishda harakatli o’yinlarni saralab samaradorligini pedagogik tajribada asoslab, murabbiylar amaliyotiga tavsiya va takliflar berish hozirgi kunda eng dolzarb vazifalardan biri bo’lib turibdi. Boshlang’ich tayorgarlik bosqichida shug’ullanuvchi yosh dzyudochilarning sport motivatsiyasini oshirishda shug’ullanuvchilarning yosh xususiyatlarini inobatga olgan holda zamon talablariga to’liq javob beradigan vosita va usullarni aniqlash hamda samaradorligi pedagogik tajriba yo’li orqali asoslash zarurati jismoniy qobiliyatlarni rivojlantirishning yangi darajasini taqazo etadi.

XULOSA: Yosh sportchilar organizmini har tomonlama rivojlantirish, sog'lig'ni mustahkamlash, tayyorgarlikning barcha boshqa turlari qatorida dzyudo sport turini boshlang'ich bosqichida puxta egallab, olganligi uchun mustahkam funktsional baza yaratishga yo'naltirilganoʻyinlar tanlab olinishi muhim vazifadir. Bu vazifalar qatoriga yosh dzyudochilarning kordinatsion qobiliyatini rivojlantirishda samarali yordam beruvchi etnosport harakatli o'yinlarni saralab olish, ularning qo'llanish jarayonida mashg'ulotlarning shiddati, hajmi va me'yorlarini aniqlash hamda amaliyotga joriy etish metodikasini ishlab chiqish hamda uning samaradorligini asoslash dolzarbligini yoʻqotganicha yoʻq.

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QASHQADARYO VILOYATIDA BALIQCHILIKKA IXTISOSLASHGAN XO‘JALIKLARNING IQTISODIY SAMARADORLIGINI OSHIRISH

Annotatsiya: *Ushbu maqolada bugungi kunda baliqchilik tarmog‘ining o‘ziga xos xususiyatlarini soha taraqqiyoti yo‘lida respublikamizning ayrim iqtisodchi olimlari va tadqiqotchilari tomonidan olib borilayotgan ilmiy-tadqiqot ishlari chuqur tahlil qilinib, ishlab chiqarish samaradorligini baholashga doir ko‘rsatkichlar yoritib berilgan.*

Kalit so‘zlar: *hovuz, mahsulot ishlab chiqarish, narx-navo, aholi iste’moli, zamonaviy texnologiya, biologik resurslar, “baliqchilik menejmenti”, “biobaliq mahsuloti”, lichinkalar, chavoq, “hovuz xo‘jaliklari”.*

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IMPROVING THE ECONOMIC EFFICIENCY OF SPECIALIZED FISH FARMING ENTERPRISES IN THE KASHKADARYA REGION

Abstract: *This article analyzes in detail the features of the fishing industry, as well as the research work carried out by some economists and researchers of our republic in the direction of the development of the industry. The indicators of efficiency assessment are highlighted.*

Keywords: *pond, production of products, pricing, consumption by the population, modern technologies, biological resources, "fish farming", "biofish product", larvae, chub, "pond farms".*

KIRISH. Qashqadaryo viloyatidagi Qashqadaryo, Tanxozdaryo, G‘uzordaryo, Surxondaryo viloyatidagi Surxondaryo va Sheroboddaryo, Jizzax viloyatidagi Sanzor va boshqa daryolar respublikaning jadal rivojlanayotgan hududlari bo‘lib, ularning rivojlanishi uchun kichik daryolarning suv resurslari strategik ahamiyatga ega. Qashqadaryo viloyati misolida aytadigan bo‘lsak, suv resurslari taqchilligi jiddiy muammo bo‘lib, Chimqo‘rg‘on, Pachkamar va Hisorak suv omborlari hajmining sezilarli darajada qisqarishi suv tanqisligining keskinlashuviga olib kelmoqda. Xududning suv xavzalari o‘ziga xos gidrologik va gidrografik xususiyatlarga ega bo‘lib, shu soxaning tadqiqotchilarini o‘ziga jalb qilib kelgan. Respublikada oziq-ovqat havfsizligini ta’minlash, mahsulot ishlab chiqarish hajmlarini oshirish, bozorlarni arzon va sifatli baliq mahsulotlari bilan to‘ldirib borish hamda mahsulotlar narx-navolarini barqarorligini saqlashga qaratilgan bir qator maqsadli dasturlar qabul qilinib, uning ijrosi samarali ta’minlanmoqda. Bundan ko‘zlangan maqsad shuki, oziq-ovqat havfsizligini ta’minlash, mavjud imkoniyatlardan samarali foydalanish hisobiga baliq yetishtirish hajmlarini keskin oshirish hamda aholi iste’moli uchun ichki bozorlarga arzon va sifatli baliq mahsulotlarini etkazib berish, intensiv usulda baliq yetishtirishni ko‘paytirish bo‘yicha zamonaviy texnologiyalarni keng joriy etish hamda sohadagi mavjud muammolar va kamchiliklarni bartaraf etish hisoblanadi.

ADABIYOTLAR TAHLILI VA METODLAR. Tarmoqning ushbu xususiyatlarini nazariy jihatdan mahalliy olimlarimizlarning tadqiqotlarida alohida e’tibor qaratilgan. Jumladan, baliqchilik tarmog‘i boshqaruv tizimini takomillashtirish hamda marketing yondashuvlar asosida tarmoq samaradorligini oshirishga qaratilgan tadqiqotlar shular jumlasidandir.

Xususan, B. A. Sarsenbayevning [2021] baliqchilik tarmog‘ini marketing yondashuvlar asosida takomillashtirishga qaratilgan tadqiqotlari natijasida “baliqchilik sohasi ishlab chiqarishda biologik resurslarni ko‘paytirish, gidrosfera va hududlarning ekologik xavfsizligini ta’minlash asosida aholi iste’molida zarur baliq va baliq mahsulotlarini yetishtirishning marketing usullari ishlab chiqilgan”[1].

Tadqiqotchi U. X. Beglayev [2020] esa muammoning boshqarish mexa nizmlarini takomillashtirishga qaratilgan bo‘lib, “baliqchilik menejmenti” va “biobaliq mahsuloti” tushunchalari ning iqtisodiy mazmuni”[2] nazariy jihatdan batafsil yoritilgan. Shuningdek, iqtisodchi olimlar A. Muxtorov va U. Sadullayevlar [2018] baliqchilik sohasini rivojlantirish omillari va o‘ziga xos jihatlariga to‘xtalib o‘tib, quyidagilarni ta’kidlab o‘tganlar: “... baliq yetishtirishda hududiy shart-sharoit, baliq yetishtirilayotgan suv havzalarining joylashgan joyi, o‘lchami, relyefi, konfiguratsiyasi, eng muhimi suv ta’minoti va uning barqarorligi soha istiqbolini belgilovchi eng muhim tashkiliy omillardan hisoblanadi”[3]

Ushbu olimlar tarmoqni barqaror rivojlanishiga ta’sir qiluvchi iqtisodiy-me’yoriy, texnologik omillar hamda suv ta’minotining barqarorligini asosiy mezon sifatida qaraydilar. I. O. Yunusovning [2020] tadqiqot ishlarida aynan baliqchilik tarmog‘ining rivojlantirish va samaradorligini oshirishga qaratilgan bo‘lib, tarmoqning o‘ziga xos xususiyatlari tizimlashtirilgan holda boshqa tarmoqlardan keskin farq qiluvchi xususiyatlaridan biri bu “baliqchilik xo‘jaligida hovuz asosiy ishlab chiqarish vositasi hisoblanishi”ga[4] alohida urg‘u qaratilgan.

Ammo, tadqiqotda hovuzdan foydalanish samaradorligi, mavjud muammolar hamda kuzatilayotgan tendensiyalar doirasida tahlillar amalga

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[1] B. A. Sarsenboyev. Baliqchilik sohasi rivojlanishini marketing yondashuvlari asosida takomillashtirish (Qoraqalpog‘iston Respublikasi misolida), Monografiya, T.: “Lesson Press” MChJ nashriyoti, 2021. – B.141.
[2] R. X. Ergashev, S. R. Xalikov, U. X. Beglayev. Baliqchilik iqtisodiyoti. Darslik, – T., “Navro‘z” nashriyoti, 2020. – 298 b
[3] В. И. Радюк. Прудовый фонд рыбоводного предприятия. Главное управление образования, наука и кадров. https://refdb.ru/ look/2680869.html
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oshirilmagan. Ma'lumki, ilmiy adabiyotlarda hovuz baliqchiligi yer fondi va hovuz fondidan tashkil topishi qayd etilgan. Ya'ni, yer fondi deyilganda baliqlarni ko'paytirish va parvarishlash hamda boshqa maqsadlarda foydalanish uchun xo'jalikka biriktirilgan jami yer maydoni tushunilsa, hofuz fondiga hovuz baliqchiligi usuli bilan baliqlarni ko'paytirish va parvarishlash uchun maxsus moslashtirilgan, baliq hovuzlari va boshqa suv havzalari bilan band bo'lgan yerlar kiritilgan. Shu munosabat bilan bizning fikrimizcha, hovuz baliqchiligi muhim manba sanalgani holda, baliqchilikning maxsus hovuzlar yoki inshootlarda baliqlarning tez o'sadigan turlarini ko'paytirish bilan shug'ullanadigan quyi tarmog'i hisoblanadi.

NATIJALAR. Hovuz baliqchiligida hovuz fondi asosiy ishlab chiqarish vositasi hisoblanadi, lekin asosiy ishlab chiqarish vositalari tarkibiga kiritilmaydi. Zero, u ishlab chiqarish vositasi sifatida boshqa fondlardan o'ziga xos xususiyatlarining mavjudligi bilan farqlanadi:

● "... hovuz maydoni jismoniy yoki ma'naviy eskirishi oqibatida yaroqsiz holatga kelganida, boshqa asosiy vositalar kabi almashtirilishi mumkin emas;

● boshqa ishlab chiqarish vositalaridan farqli, hovuz tubining mahsuldorligi bo'yicha eskirmaydi, aksincha, to'g'ri foydalanilganda nafaqat suv havzasi gidrokimyoviy rejimining shakllanishiga, balki baliqlar uchun tirik ozuqalarning ko'payishi hamda rivojlanishiga ham ijobiy ta'sir ko'rsatadi;

● hovuz maydonidan foydalanish faqat tabiiy ozuqa bazasi hisobiga baliq mahsulotlari yetishtirish bilan chegaralanib qolmaydi, balki uni sun'iy ozuqalar hisobiga ko'paytirilishi mumkin"[5].

Baliqchilik xo'jaliklarida hovuzlar xizmat ko'rsatilishiga ko'ra turli guruhlarga ajratish mumkin. Ya'ni suv bilan ta'minlovchi, baliq mahsulotlarini ishlab chiqarish, kasallangan baliqlarni sanitariya-profilaktika va karantin-izolyator hovuzlarida boqish hamda yordamchi (qafas) hovuzlar.

Hovuz xo'jaliklarida ishlab chiqarishni tashkil etish hovuz fondining texnik asbob-uskunalar bilan ta'minlanganlik darajasiga bog'liq. Hovuz fondining texnik asbob-uskunalar bilan ta'minlanganlik deganda uning gidrotexnik inshootlar (plotinalar, dambalar, suvni boshqaradigan qurilmalar, nasos stansiyalari, baliq ovlagichlar va h.k.) jihozlanish darajasi va sifati tushuniladi. Bunday inshootlar hovuz fondining aktiv qismi hisoblanadi va baliq mahsuldorligini oshirishning mavjud imkoniyatlarini belgilaydi.

Hovuz fondi texnik asbob-uskunalar bilan ta'minlanganligining iqtisodiy ko'rsatkichlari hovuz maydoni birligining balans qiymati va inshootlar guruhi qiymatining hovuz baliqchiligidagi asosiy ishlab chiqarish vositalari qiymatidagi ulushi hisoblanadi. Hovuz fondining texnik asbob-uskunalar bilan ta'minlanganligi inshootlar qiymatining asosiy ishlab chiqarish vositalari umumiy qiymatidagi ulushi bilan tavsiflanadi.

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[5] В. И. Радюк. Прудовый фонд рыбоводного предприятия. Главное управление образования, наука и кадров. https://refdb.ru/ look/2680869.html В. И. Радюк. Прудовый фонд рыбоводного предприятия. Главное управление образования, наука и кадров. https://refdb.ru/ look/2680869.html

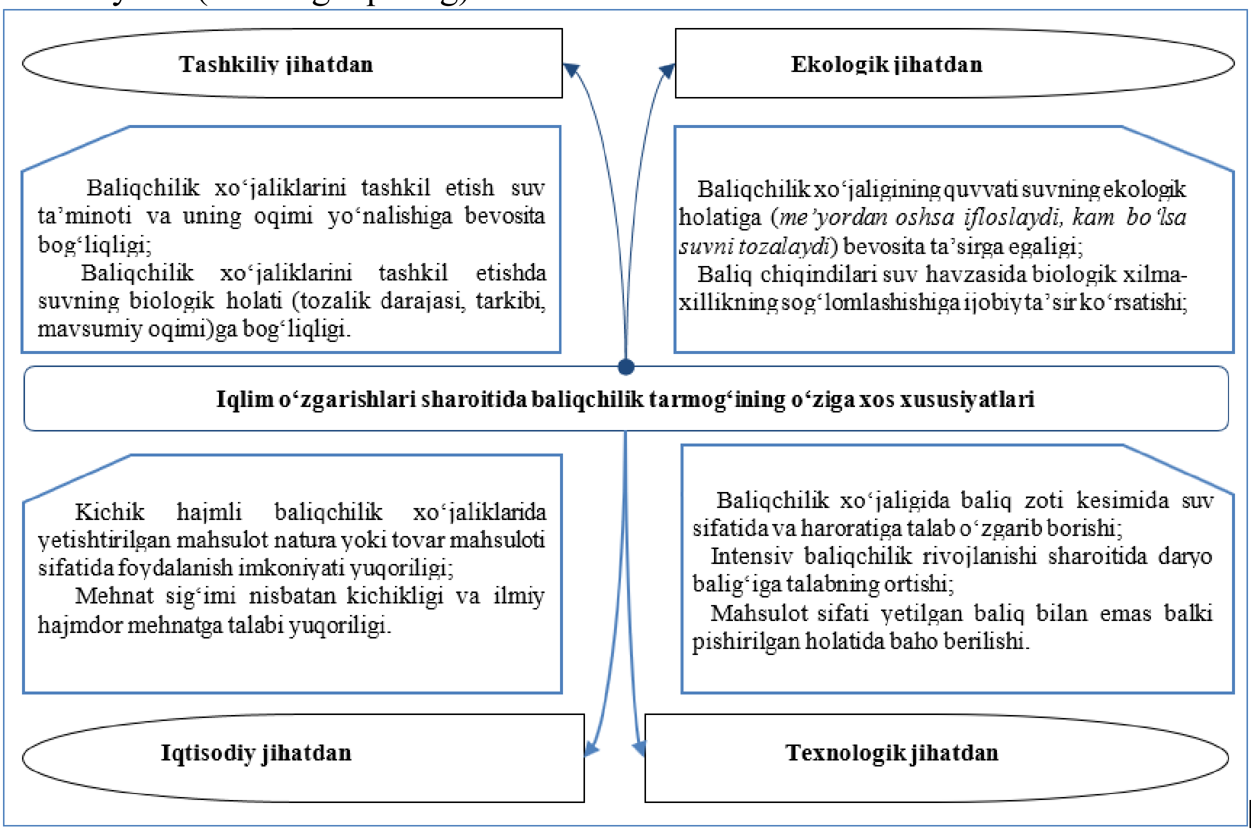
Global iqlim o‘zgarishlari sharoitida baliqchilik xo‘jaliklarining tashkil etish, ekologik muvozanatni ta’minlash, iqtisodiy samarali faoliyatni tashkil etish hamda texnologik yangilanib borishini inobatga olgan holda ushbu jihatlarni o‘z ichiga qamrab olgan o‘ziga xos xususiyatlarini e’tiborga olishni taqazo etmoqda.

Aniqroq aytganda, tashkiliy jihatlari sifatida baliqchilik xo‘jaliklarini tashkil etish suv ta’minoti va uning oqimi yo‘nali shiga bevosita bog‘liqligi hamda baliqchilik xo‘jaliklarini tashkil etishda suvning biologik holati (tozalik darajasi, tarkibi, mavsumiy oqimi)ga bog‘liqligi kabi xususiyalarni kiritish mumkin.

Avvalo, hovuz fondidan foydalanish samaradorligini baholashning muhim ko‘rsatkichi bo‘lib, umumiy baliq mahsuldorligi va inshootlar qiymatining bir birligiga to‘g‘ri keladigan baliq mahsuloti bilan tavsiflanadi. Ya’ni, bir gektar yaylov hovuziga to‘g‘ri keladigan inshootlar qiymati ulushining oshishi bilan hovuz fondidan foydalanish samaradorligi o‘sadi.

Shuningdek, baliqchilik xo‘jaliklarida asosiy vositalar, ishlab chiqarish zaxiralari (materiallar) va aylanma mablag‘larlarning foydalilik darajasi ko‘rsatkichi ham muhim ko‘rsatkichlardan bo‘lib, bunda ayniqsa, asosiy vositalar va ishlab chiqarish zaxiralardan samarali foydalanishga katta e’tibor qaratilishi talab etiladi.

Tadqiqotlarimiz asosida iqlim o‘zgarishlari sharoitida baliqchilik tarmog‘ining o‘ziga xos xususiyatlarini quyidagicha guruhlash mumkin, deb hisoblaymiz (1-rasmga qarang).



1-rasm. Mamlakatimizda iqlim o‘zgarishlari sharoitida baliqchilik tarmog‘ining o‘ziga xos xususiyatlari[6]

O‘z navbatida texnologik o‘ziga xosligi sifatida baliqchilik xo‘jaligida baliq zoti kesimida suv sifatida va haroratiga talab o‘zgarib borishi, intensiv baliqchilik rivojlanishi sharoitida daryo balig‘iga talabning ortishi, mahsulot sifati etilgan baliq bilan emas balki pishirilgan holatida baho berilishi kabilarni kiritishimiz mumkin.

Yuqorida qayd etilgan baliqchilik tarmog‘ining o‘ziga xos xususiyatlaridan kelib chiqqan holda baliq mahsulotlarini ishlab chiqarish va tarmoq samaradorligini baholash muhim masalalardan sanaladi.

Eklogik jihatdan esa, baliqchilik xo‘jaligining quvvati suvning ekologik holatiga (me’yordan oshsa ifloslaydi, kam bo‘lsa suvni tozalaydi) bevosita ta’sirga egaligi hamda baliq chiqindilari suv havzasida biologik xilma-xillikning sog‘lomlashishiga ijobiy ta’sir ko‘rsatishi kabi o‘ziga xosligi bilan ajralib turadi.

Shuningdek, iqtisodiy jihatdan kichik hajmli baliqchilik xo‘jaliklarida yetishtirilgan mahsulot natura yoki tovar mahsuloti sifatida foydalanish imkoniyati yuqoriligini hamda mehnat sig‘imi nisbatan kichikligi va ilmiy hajmdor mehnatga talabi yuqoriligi bilan ajralib turadi.

Tadqiqot jarayonida iqtisodiy tahlil qilish, qiyosiy taqqoslash, statistik guruhlash, monografik kuzatish, mantiqiy va abstrakt fikrlash usullaridan keng foydalanilgan.

Baliqchilik xo‘jaliklarida ishlab chiqarish sohasidagi aylanma kapital o‘z navbatida quyidagilarga bo‘linadi:

a) ishlab chiqarish zaxiralari (baliqlantirish materiallari, ozuqalar, o‘g‘itlar, yoqilg‘ilar, idishlar, ehtiyot qismlar, inventar va jihozlar, ov qurollari, baliqlarni kasalliklardan himoyalash vositalari);

b) tugallanmagan ishlab chiqarish (o‘stiruvdagi barcha baliqlar, jumladan, to‘ldiruvchi to‘dadagi baliqlar ham);

d) o‘zida tayyorlangan yarim fabrikatlar (sotish uchun mo‘ljallangan o‘stiruv va qishlov hovuzlaridagi baliqlantirish materiallari) va sotib olingan yarim fabrikatlar (lichinkalar, chavoq (malek)lar, bir yillik baliqlar).

Xo‘jalikning muoamaladagi aylanma mablag‘lari esa sotish uchun mo‘ljallangan tayyor mahsulotlar va pul mablag‘lari: hisob-kitob scheti, va kassa, bankdagi boshqa schetlar.

Ushbu mablag‘lardan foydalanish samaradorligini baholashda baliqchilik xo‘jaliklarida kreditor qarzlarning kunlik aylanmasi va debitor qarzlarning kunlik aylanmasi ko‘rsatkichini hisoblash ham kerak bo‘ladi. Bunda kunlik aylanmani kamaytirish uchun kreditor va debitor qarzlarning miqdorini kamaytirish va muddatini o‘tkazib yubormaslik hamda mahsulot hajmi va foydani oshirish choralari ko‘rilishi lozim. Shuningdek, baliqchilik xo‘jaliklarida qoplash koeffitsienti, ya’ni to‘lovga qobiliyatlilik ko‘rsatkichi yaxshi bo‘lishi, ya’ni ma’lum

[6] Muallif tadqiqotlari asosida tuzilgan

bir davrga (oy, chora, yil) to‘lov mablag‘lari jami summasi to‘lov mablag‘lari jami summasidan ko‘p bo‘lishi lozim.

Debitorlik qarzdorlikning pasayish ko‘rsatkichi ham baliqchilik tarmog‘i samaradorligini baholashning muhim ko‘rsatkichlaridan hisoblanadi. Debitorlik qarzlari muddatini o‘tkazib yubormaslik, o‘z vaqtida to‘lanmagan debitorlik qarzlari uchun penya hisoblanishi va to‘lanishi natijasida ortiqcha xarajatlar qilinishining oldini oladi. Shuningdek, baliqchilik tarmog‘ida iqtisodiy samaradorlikning qo‘shimcha muhim ko‘rsatkichlari mavjud. Xususan:

Baliqchilik xo‘jaliklarida asosiy vositalarning eskirish koeffitsienti oshib ketmasligi va yangilash koeffitsienti esa yuqoriroq bo‘lishi talab etiladi. Buning uchun eskirib bo‘lgan asosiy vositalarni hisobdan chiqarish va yangi, zamonaviy asosiy vositalarni sotib olib ta’minlash kerak bo‘ladi

Baliqchilik xo‘jaliklarida mehnat unumdorligi ko‘rsatkichi ham muhim ko‘rsatkichlardan bo‘lib, xodimlarni mutaxassisligi bo‘yicha ishga jalb etish, ularning malakasini oshirib borish hamda bajargan ish miqdori va sifatiga qarab haq to‘lashga katta e’tibor qaratilishi lozim. Shunda xodimlarning foydali ish koeffitsienti ham yuqori bo‘ladi. Baliqchilik xo‘jaliklarida ishlab chiqarish quvvatlaridan foydalanish koeffitsienti hamda energiya samaradorlik ko‘rsatkichlari ham muhim ko‘rsatkichlardan bo‘lib, bunda ishlab chiqarish quvvatlaridan samarali foydalanish va mahsulot qiymati tarkibida energiya xarajati ulushini kamaytirish choralari ko‘rilishi lozim.

Baliqchilik xo‘jaliklarida jami ishlab chiqarilgan mahsulot hajmida innovatsion mahsulotning ulushi ko‘rsatkichi ham muhim ko‘rsatkichlardan bo‘lib, mahsulot hajmida innovatsion mahsulotning ulushini oshirish choralari ko‘rilishi lozim. Bunda ilm-fan yutuqlari va ilg‘or axborot texnologiyalarini qo‘llagan holda mahsulot ishlab chiqarishga e’tibor qaratish zarur bo‘ladi.

Baliqchilik xo‘jaliklarida har bir ishchi hisobga olingan holda xodimlarni o‘qitish xarajatlari aniq belgilab qo‘yish va bunga amal qilish lozim. Xodimlar ishlashi uchun etarli shart-sharoitlarni yaratish kerak. Bu esa, kadrlar qo‘nimsizligi koeffitsientining oshib ketmasligiga ta’sir ko‘rsatadi.

Umuman olganda bizning fikrimizcha, baliqchilik xo‘jaliklarida investitsiya dasturini pul ko‘rinishida ijro qilish indikatori, quvvatlarni ishga tushirish parametrlarini bajarish indikatori hamda eksport parametrlarini bajarish ko‘rsatkichlari ham muhim ko‘rsatkichlardan hisoblanadi.

Aytish joizki, intensivlashtirish bir gektar suv havzasiga qo‘shimcha xarajatlarni talab qiladi, ammo ular faqat, agar baliq mahsulotlari ishlab chiqarishning qo‘shimcha o‘sishi qo‘shimcha xarajatlarning o‘sish sur’atidan yuqori bo‘lsagina samarali hisoblanadi. Ushbu maqsadda innovatsion ishlanmalarni amaliyotga joriy etish muhim bo‘lib, quyidagi yo‘nalishlarda amalga oshirish maqsadga muvofiq. Ya’ni:

a) mehnat resurslarini tejovchi intensivlashtirish – ishchilar sonini kamaytirishga qaratiladi;

b) fondlarni tejovchi intensivlashtirish – (hovuz fondi, unga biriktirilgan yer maydoni, asosiy vositalar, aylanma mablag‘lar va h.k.) unumdorligi yuqoriroq mashinalarni qo‘llashga yo‘naltirilgan;

d) material tejovchi intensivlashtirish – mahsulot birligiga to‘g‘ri keladigan xom ashyo, materiallar, yoqilg‘i, elekr energiyasi va boshqa resurslarni tejashga yo‘naltirilgan.

Intensivlashtirish darajasi parvarishlanayotgan ob’ektga (iliq suv baliqlari, sovuq suv baliqlari), joylashgan yeriga, xo‘jalik yuritish tizimiga (ekstensiv, yarimintensiv, intensiv) bog‘liq. Baliqlarni yaylov texnologiyalari (ko‘l tovar baliqchiligi, ayrim hovuz xo‘jaliklari va b.) asosida parvarishlash ekstensiv yo‘l, maxsus ozuqalar va moslamalar (industrial-iliq suvli xo‘jaliklar) yordamida amalga oshirish esa intensiv yo‘l hisoblanadi.

Umuman ma’noda, bizningcha baliqchilikni intensivlashtirish ko‘rsatkichlarini quyidagi uchta guruhga bo‘lib tavsiflash mumkin (2-rasmga

qarang):

2-rasm: Baliqchilikda intensivlashtirish darajasiga baho berishda ko‘rsatkichlar tizimi[7]

Shuningdek, texnologik jihatdan havuzga baliq qo‘yish zichligi ko‘rsatkichi ham muhim sanaladi. Baliq ishlab chiqarishning ma’lum darajada intensivlashtirilgan (meliorativ tadbirlar, ozuqa organizmlarining intro- duksiyasi, hovuzlarni o‘g‘itlash, baliqlarga oqsilga boy ozuqalar berilishi va b.) sharoitida hovuzning eng yuqori baliq mahsuldorligi va baliqning standart og‘irligiga erishiladigan baliq qo‘yilishi zichlashtirilgan deb ataladi. Hovuzga baliq qo‘yish zichligi intensivlashtirish darajasiga qarab normal holatdan 2-5 marta yuqori bo‘lishi mumkin.

Umuman olganda, hovuz baliqchiligida qo‘llanilayotgan intensivlashtirish

[7] Mualliflarning tadqiqotlari asosida tuzilgan

tadbirlari bilan birga, havzaga bitta turdagi va yoshdagi baliqlarni qo‘yishni zichlashtirish, havzaga baliqlarni aralashtirib qo‘yish, qo‘shimcha baliqlar qo‘yish va polikultura hisobiga baliq mahsuldorligini oshirishga erishish mumkin.

Baliqchilik tarmog‘i iqtisodiy samaradorligini baholashda tarmoqni qishloq xo‘jaligining boshqa tarmoqlaridan tubdan farq qiluvchi xususiyatlarini nazarda tutishni maqsadga muvofiq hisoblab, quyidagi xulosalarni shakllantiramiz.

Xulosa. Bizning fikrimizcha, hovuz baliqchiligi muhim manba sanalgani holda, baliqchilikning maxsus hovuzlar yoki inshootlar (qafas va b.) da baliqlarning tez o‘sadigan turlarini ko‘paytirish bilan shug‘ullanadigan quyi tarmog‘i hisoblanadi. Baliqchilik chorvachilikning muhim tarmoqlaridan sanalib, uni samaradorligini baholash tarmoqning o‘ziga xos xususiyatlarini hisobga olishni talab etadi. Tarmoqning ushbu xususiyatlarini nazariy jihatdan mahalliy olimlarimizlarning tadqiqotlarida alohida e’tibor qaratilgan.

Hovuz fondidan foydalanishning samaradorligi umumiy baliq mahsuldorligi va inshootlar qiymatining bir birligiga to‘g‘ri keladigan baliq mahsuloti bilan tavsiflanadi. 1 ga yaylov hovuziga to‘g‘ri keladigan inshootlar qiymati ulushining oshishi bilan hovuz fondidan foydalanish samaradorligi o‘sadi.

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HOW CAN HR CONTRIBUTE TO ENVIRONMENTAL SUSTAINABILITY

Abstract *This paper explores the pivotal role human resources (HR) departments play in fostering environmental sustainability within organizations. By integrating sustainable practices into recruitment, training, and corporate culture, HR can significantly reduce an organization's carbon footprint. HR professionals can also design performance metrics that reward eco-friendly initiatives, further embedding sustainability in business operations. Insights from notable scholars and the initiatives championed by Uzbekistan's President Shavkat Mirziyoyev underscore the importance of such efforts in addressing global environmental challenges. Moreover, this study highlights how HR can leverage technology to enhance the effectiveness of green policies. Furthermore, this paper discusses successful international practices from countries like the UK, the USA, Japan, and Singapore, which demonstrate the global applicability of green HR initiatives.*

Introduction Environmental sustainability has emerged as a critical issue globally. Climate change, resource depletion, and pollution are pressuring organizations to adopt more sustainable practices. Organizations are increasingly expected to adopt practices that minimize environmental impact. Human resources, traditionally tasked with managing employee relations, now have a strategic role in embedding sustainability into organizational culture. This shift involves not only operational changes but also a rethinking of corporate values and long-term goals. Shavkat Mirziyoyev, in his recent address, emphasized the need for all sectors to contribute to ecological preservation, positioning HR as a key player in achieving these goals. His initiatives, such as promoting renewable energy and introducing environmental education, illustrate the broader vision needed for sustainable development. Additionally, HR can promote cross-departmental collaboration, ensuring all employees are engaged in sustainability efforts. Internationally, countries like the UK have adopted carbon-neutral policies, while the USA's Green New Deal has redefined corporate environmental responsibility. Japan's integration of smart technologies and Singapore's urban greening projects serve as exemplary models of sustainable growth. In Uzbekistan, the government is actively implementing green reforms, such as expanding solar energy projects and supporting eco-friendly startups.

Methods This study employs a qualitative approach, analyzing literature on HR practices and sustainability. Academic journals, organizational reports, and government publications were reviewed to identify best practices and emerging trends. Key strategies identified include green recruitment, training programs, and fostering a sustainability-driven corporate culture. Data from international case studies and national initiatives, particularly from Uzbekistan, provide a foundation for discussion. Interviews with HR professionals and sustainability experts were conducted to gain deeper insights into practical applications. The study also incorporates data from environmental audits to understand the measurable impacts of green HRM strategies. Furthermore, relevant statistical analyses were employed to validate the findings. Practices from leading countries, such as the UK's focus on green job creation, the USA's renewable energy workforce training, Japan's energy efficiency policies, and Singapore's water conservation strategies, were examined for their effectiveness. Additionally, Uzbekistan's solar energy initiatives and its partnership with international organizations on sustainable agriculture were analyzed to highlight the nation's commitment to environmental progress.

Results The findings reveal several HR-driven strategies that significantly impact environmental sustainability:

1. **Green Recruitment:** Prioritizing candidates with a sustainability mindset helps build a workforce aligned with environmental goals. This approach reduces the need for extensive retraining and fosters innovation in sustainable practices. For instance, the UK's emphasis on green jobs has attracted a workforce passionate about environmental stewardship.
2. **Sustainability Training:** Regular training sessions ensure employees are equipped with the knowledge to adopt eco-friendly practices. Training can cover topics such as energy conservation, waste management, and green commuting. The USA's initiatives in retraining workers for renewable energy roles exemplify the success of such programs.
3. **Corporate Culture:** Promoting a green workplace culture encourages sustainable behaviors, such as reducing waste and conserving energy. Celebrating achievements in sustainability and recognizing eco-conscious employees can further embed these values. Japan's "Kaizen" philosophy, which emphasizes continuous improvement, has been adapted to support green practices.
4. **Employee Engagement Programs:** Initiatives such as green committees and sustainability challenges motivate employees to take ownership of environmental goals. Singapore's community-driven urban gardening projects have fostered greater environmental awareness and participation.
5. **Use of Technology:** Implementing digital tools to monitor and reduce resource consumption enhances the efficiency of green initiatives. Japan's use of smart grids and the USA's advancements in energy management software illustrate the potential of technology in sustainability.
6. **Uzbekistan's Green Startups and Projects:** Notable efforts include the government-supported startup "Green Energy Solutions," which focuses on

solar panel production, and the Tashkent-based “EcoPlast,” which recycles plastic waste into usable materials. The state’s “Yashil Makon” program, aimed at planting millions of trees nationwide, demonstrates a large-scale commitment to reforestation and combating desertification.

7. **State-Backed Initiatives:** The Uzbek government has also launched the “Green Uzbekistan” strategy, which includes projects such as constructing energy-efficient buildings and transitioning public transport to electric and hybrid vehicles.

Discussion Scholars like Renwick et al. (2013) highlight HR’s potential in implementing green practices through “Green HRM” initiatives. Aligning HR policies with sustainability goals leads to both environmental and economic benefits. Green HRM integrates environmental objectives with HR functions, such as recruitment, performance management, and rewards systems. Mirziyoyev’s reforms, such as the introduction of green energy projects and afforestation programs, further support the role of HR in driving environmental responsibility at the organizational level. Additionally, HR can foster partnerships with NGOs and governmental bodies to align corporate sustainability initiatives with national policies. These collaborations can amplify the impact of HR-driven sustainability measures. The implementation of telecommuting policies, for instance, not only reduces carbon emissions but also enhances work-life balance. HR’s ability to manage change and engage employees is crucial for the successful adoption of these measures. From the UK’s emphasis on circular economy practices to Singapore’s advanced waste management systems, international successes provide valuable lessons for HR professionals worldwide. Uzbekistan’s initiatives, including solar energy development and partnerships with international agencies like the UNDP, showcase the country’s commitment to global sustainability standards.

Conclusion HR departments are uniquely positioned to influence organizational sustainability. By adopting green HRM practices, they can foster a culture of environmental responsibility. These practices not only benefit the environment but also improve employee satisfaction and organizational reputation. Mirziyoyev’s vision for a greener Uzbekistan provides a compelling framework for integrating these practices, benefiting both organizations and the environment. The alignment of HR strategies with global sustainability goals is not just a necessity but an opportunity for organizations to lead in the fight against climate change. The achievements of countries like the UK, USA, Japan, and Singapore demonstrate the transformative potential of HR-led sustainability initiatives, offering a roadmap for organizations globally. Uzbekistan’s efforts, including state-backed green programs and startup ecosystems, further emphasize the critical role of HR in driving nationwide ecological progress.

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THE LANGUAGE OF BUSINESS: DECODING PHRASEOLOGICAL UNITS AND THEIR POWER

Abstract. *Beyond individual words, language often employs fixed expressions – phraseological units – that carry specific meanings. This article explores the diverse landscape of phraseological units, examining how they are classified in different linguistic traditions and providing examples from the world of business. We will delve into how these expressions function, their varied structures, and their impact on business communication, illustrating their complexity and importance in professional settings.*

Keywords: *idioms, semi-idioms, collocations, proverbs, phraseological units, clichés, catchphrases.*

Introduction

The business world is a realm of precise language and carefully crafted messages. While individual words are crucial, a significant portion of effective business communication relies on "phraseological units" – fixed expressions whose meaning often transcends the sum of their individual words. These units, which include idioms, collocations, and proverbs, are the building blocks of fluent, natural-sounding communication. This article aims to demystify phraseological units, exploring their different types, how linguists classify them, and how they're used in the business field. Understanding these expressions can sharpen business communication skills and enhance comprehension in professional interactions.

Methods

This article draws on established theories in phraseology and lexicology from various linguistic traditions, including cognitive linguistics, structural linguistics, and corpus linguistics. We will discuss common classification systems, highlighting key distinctions between different types of phraseological units. These systems will be illustrated with a range of examples from the business domain, collected from professional articles, business conversations and business dictionaries. The article emphasizes the descriptive analysis of these units, aiming to make the concepts clear and engaging for a broad audience.

Results

Phraseological units, also known as fixed expressions, are multi-word combinations whose meaning is not fully predictable from the individual meanings of their components. They are treated as single semantic units. These expressions are not merely random strings of words; they are stored as whole units in our mental lexicon.

They're characterized by:

- **Fixedness:** They tend to have a fixed word order and don't allow for much variation.
- **Non-compositionality:** Their meaning is not always derived from the sum of their parts.
- **Frequency:** They are frequently used and are often familiar to native speakers.

Classifying Phraseological Units: Different Perspectives

Linguists have developed various ways of classifying phraseological units. Here are some key perspectives:

1. **Based on Semantic Transparency:**
   - **Idioms:** These are the most opaque units, where the meaning is completely non-compositional. Examples: "*to be in the red*" (meaning to be in debt), "*to think outside the box*" (meaning to think creatively). These cannot be understood literally and need to be learned as single units.
   - **Semi-idioms:** These units have some degree of transparency. One part of the unit might be literal while another is figurative. Examples: "*to play hardball*" (meaning to be aggressive), "*to cut corners*" (meaning to do something badly in order to save money or time).
   - **Collocations:** These are units where words frequently occur together, although the meaning is generally compositional. Examples: "*market share*," "*profit margin*," "*business strategy*."
2. **Based on Grammatical Structure:**
   - **Verbal phraseological units:** These units include a verb as their main component. Examples: "*to close the deal*," "*to take a risk*," "*to make a profit*."
   - **Nominal phraseological units:** These units center around a noun. Examples: "*a win-win situation*," "*a competitive edge*," "*the bottom line*."
   - **Adjectival phraseological units:** These units function as adjectives. Examples: "*cash-strapped*," "*customer-centric*," "*market-leading*."
   - **Adverbial phraseological units:** These units function as adverbs. Examples: "*in the long run*, ""*on a large scale*,""*at all costs*."
3. **Based on Pragmatic Function**
   - **Proverbs/Sayings:** These are short, traditional expressions with a moral or common-sense message. Examples: "*Time is money*" "*Look before you leap*" (implying cautious actions in business decisions) and "*Don't put all your eggs in one basket*" (diversification).
   - **Clichés:** These are phrases that have become overused through repetition, sometimes losing their impact. Examples: "*at the end of the day*," "*going forward*," "*think outside the box*."
   - **Slogans/Catchphrases:** These are short phrases used in marketing or company branding. Examples: "*Just Do It*," "*Connecting People*."

Phraseological Units in the Business Field: Examples

The business field is a rich source of phraseological units. Here are some common examples and how they are used:

- **"To be on the same page":** (Idiom). Meaning to have a shared understanding. *Example*: "Before we proceed, let's make sure everyone is on the same page regarding the project goals."
- **"To touch base":** (Idiom). Meaning to make contact. *Example*: "I'll touch base with you next week to discuss the sales figures."
- **"To raise the bar":** (Idiom). Meaning to set higher standards. *Example:* “Our aim is to raise the bar in customer service."
- **"Supply chain":** (Collocation). Refers to the network of organizations and activities to get products to consumers. *Example*: "The company is restructuring its supply chain to improve efficiency."
- **"Due diligence":** (Collocation). Refers to the process of conducting thorough research and investigations before a business deal. *Example:* “The investors carried out due diligence before approving the merger.”
- **"Scalable solution":** (Collocation). Refers to something adaptable to meet growing needs. *Example:* "We need a scalable solution for our customer management system."
- **"Mission statement":** (Collocation). Refers to a formal summary of the aims and values of a company. *Example*: “Our company’s mission statement emphasizes our commitment to sustainability."
- **"A ballpark figure":** (Semi-idiom). A rough estimate. *Example*: “Can you give me a ballpark figure for the project costs?”
- **"The elephant in the room":** (Semi-idiom). An obvious problem that no one wants to discuss. *Example*: "Let's address the elephant in the room, which is our declining sales figures."

Discussion

Phraseological units are not mere linguistic quirks; they are critical for effective communication, especially in the specialized world of business. They add color, fluency, and efficiency to language. They also demonstrate a user's familiarity with business discourse.

However, misusing phraseological units can lead to misunderstanding, especially for non-native speakers. The nuances of meaning can be complex, and a literal translation often doesn't capture the intended message. Therefore, mastering these units is crucial for any professional seeking to communicate effectively in a business environment.

Conclusion

Phraseological units play a significant role in shaping communication, especially within specialized fields like business. They are not just decorative elements but are rather crucial components of effective and natural-sounding language. By understanding the different types and functions of these expressions, professionals can gain a competitive advantage, enhancing their comprehension, writing, and speaking skills. Further exploration into the use of phraseological units across different domains would give a rich understanding of language and its dynamic usage.

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ZAMONAVIY TA’LIM MUHITIDA TALABALARNI INGLIZ TILI VA MATEMATIKA FANLARINI O‘QITISH JARAYONIDA PEDAGOGIK KOMPETENSIYASINI RIVOJLANTIRISH

Annotatsiya: *Ushbu maqola boshlang’ich ta’lim va sport tarbiyaviy ish ta’lim yo‘nalishi talabalari uchun mo‘ljallangan bo‘lib, unda matematika o‘qitish metodikasi fanining predmeti, maqsad va vazifalari, tamoyillari, ta’lim metodlarining tasnifi, matematika fanlarini o‘qitish jarayonida o’qitish metodlari, interfaol metodlar, zamonaviy pedagogik va axborot texnologiyalardan foydalanish, matematikani o’qitish shakllari, o‘quvchilarni bilim, ko‘nikma va malakalarini tashxis etish masalalari yoritilgan.*

Kalit so'zlar: *matematika o‘qitish metodikasi, interfaol metodlar, tashxis, iqtisodiy, siyosiy, huquqiy, tizimli baholash.*

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DEVELOPMENT OF PEDAGOGICAL COMPETENCE IN THE PROCESS OF TEACHING STUDENTS ENGLISH AND MATHEMATICS IN A MODERN EDUCATIONAL ENVIRONMENT

Abstract: *This article is intended for students of the educational field of primary education and sports and educational work, which outlines the subject, goals and objectives of the discipline, methods of teaching mathematics, principles, classification of teaching methods, teaching methods in the process of teaching mathematical disciplines, interactive methods, the use of modern pedagogical and information technologies, forms of teaching mathematics, the formation of students' knowledge, skills, issues of competence diagnostics.*

Keywords: *Mathematics teaching methods, interactive methods, diagnostics, economic, political, legal, systemic assessment.*

Zamonaviy ta’limda ta’lim muassasalardagi o‘qitish sifatini ta’minlashga qaratilgan tizimli islohotlar zamirida bo‘lajak o‘qituvchilarning kasbiy mahorati, ularning zamonaviy ta’lim va innovatsion texnologiyalar, ilg‘or xorijiy tajribalarni o‘zlashtirish borasidagi zamonaviy bilim, ko‘nikma va malakalarini rivojlantirish dolzarb vazifalardan sanaladi. Mamlakatimizda pedagog kadrlarni tayyorlash jarayonini modernizatsiyalash, sohadagi zamonaviy rivojlanish tendentsiyalari, ilg‘or xorijiy tajribalar va innovatsion yondashuvlar asosida ta’lim mazmuni va o‘qitish sifatini takomillashtirish muhimligi sababli u davlat siyosati darajasiga ko‘tarilgan.

Respublikamizda umumiy o‘rta ta’lim maktablarining uzluksiz rivojlanishi uchun iqtisodiy, siyosiy, huquqiy shart-sharoit yaratildi. Jumladan, hukumatimiz tomonidan qabul qilingan qator me’yoriy hujjatlarda o‘qitishni sifat jihatdan yangi bosqichga ko‘tarish sohasida qator tadbirlar boshlab qo‘yilgan. Xususan, boshlang‘ich ta’limda o‘qitishga alohida e’tibor qaratilib, bo‘lajak boshlang‘ich sinf o‘qituvchilarini zamon talablari asosida malakali kadr etib tayyorlash bugungi kunning kechiktirib bo‘lmas muammolaridan biri sanaladi. Shuni hisobga olgan holda O‘zbekiston Prezidenti SH.M.Mirziyoyev quyidagilarni ta’kidlaydi: “Maktab o‘quv dasturlarini ilg‘or xorijiy tajriba asosida takomillashtirish, o‘quv yuklamalari va fanlarni qayta ko‘rib chiqish, ularni xalqaro standartlarga moslashtirish, darslik va adabiyotlar sifatini oshirish zarur.

Umumiy o‘rta ta’limning davlat ta’lim standartining maqsad va vazifalari

Davlat ta’lim standartlarining maqsadi va vazifalari nimalardan iborat? Davlat ta’lim standartlarining joriy etilishi quyidagi maqsadlar amalga oshirilishini nazarda tutadi:

- ta’limning yuksak sifatini hamda mamlakatda amalga oshirilayotgan chuqur iqtisodiy va ijtimoiy islohotlarni, rivojlangan demokratik davlat barpo etish talablariga javob beruvchi raqobatbardosh kadrlar tayyorlanishini ta’minlash;
- mamlakatning ijtimoiy va iqtisodiy taraqqiyoti istiqbollaridan, jamiyat ehtiyojlaridan, fan, texnika va texnologiyaning zamonaviy yutuqlaridan kelib chiqib kadrlar tayyorlash mazmunini tartibga solish;
- ta’limning demokratlashuvi, insonparvarlashuvi va ijtimoiylashuvi, ta’limoluvchilarning huquqiy va iqtisodiy bilimlari darajasini, shuningdek ta’lim jarayoni samaradorligini oshirish;
- sifatli ta’lim xizmatlari ko’rsatish, ta’lim va kadrlar tayyorlash sohasida shaxsning, jamiyat va davlatning manfaatlarini himoya qilish;
- kadrlar tayyorlash sifatini va ta’limfaoliyatini baholash mezonlarini va tartibini belgilash;
- ta’limjarayonini va kadrlar tayyorlashning izchilligi va uzluksizligini ta‟minlash;
- mehnat va ta’limxizmatlari bozorida raqobatbardoshlikni ta‟minlash. Davlat ta’limstandartlarining vazifalari:
- ta’limsifatiga va kadrlar tayyorlashga, ko„rsatiladigan ta’limxizmatlari turlariga nisbatan qo„yiladigan maqbul talablarni belgilash;
- ta’limga va uning pirovard natijalariga, ta’limoluvchilarning bilimi va kasb malakasi darajasini vaqti-vaqti bilan baholash tartibiga, shuningdek ta’limfaoliyati sifati ustidan nazorat qilishga nisbatan qo’yiladigan tegishli talablarni belgilovchi meyoriy negizni yaratish;

- xalqning boy aql-zakovat merosi va umuminsoniy qadriyatlar asosida ta'limoluvchilarni ma‟naviy-axloqiy tarbiyalashning samarali shakllari va usullarini joriy etish;
- ta'limning barcha turlarida ular mazmunini hamda olib boriladigan ta'limva tarbiyani kelishib olish ularning o'zaro bogliqligini, uzluksiz ta'limtizimida va kadrlar tayyorlashda izchillikni ta‟minlash;
- o'quv-tarbiya va ta'limjarayoniga, pedagogik va axborot texnologiyalari bilan ta‟minlashga, ta'limdarajasini nazorat qilishga, ta'limmuassasalarida ta'limoluvchilar va ularni bitiruvchilarning malakasiga nisbatan meyorlar va talablarni belgilash;
- ta'limva kadrlar tayyorlash sifatiga baho berishning xolis tizimini, ta'lim muassasalarini attestatsiyadan o'tkazish va akkredetatsiya qilishni joriy qilish;
- kadrlarni maqsadli va sifatli tayyorlash uchun ta‟lim, fan va ishlab chiqarishning samarali integratsiyasini ta‟minlash;
- milliy standartlar talabini ta'lim sifati va kadrlar tayyorlashga nisbatan xalqaro talablarga muvofiqligini ta'minlash.

Davlat ta'lim standartining maqsadi — umumiy oʻrta ta'lim tizimini mamlakatda amalga oshirilayotgan ijtimoiy-iqtisodiy islohotlar, rivojlangan xorijiy mamlakatlarning ilgʻor tajribalari hamda ilm-fan va zamonaviy axborot-kommunikatsiya texnologiyalariga asoslangan holda tashkil etish, ma'naviy barkamol va intellektual rivojlangan shaxsni tarbiyalashdan iborat.

Davlat ta'lim standartining vazifalari quyidagilardan iborat:
umumiy oʻrta ta'lim mazmuni va sifatiga qoʻyiladigan talablarni belgilash;
milliy, umuminsoniy va ma'naviy qadriyatlar asosida oʻquvchilarni tarbiyalashning samarali shakllari va usullarini joriy etish;
oʻquv-tarbiya jarayoniga pedagogik va zamonaviy axborot-kommunikatsiya texnologiyalarini joriy etish, umumiy oʻrta ta'lim muassasalarining oʻquvchilari va bitiruvchilarining malakasiga qoʻyiladigan talablarni belgilash;

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ZAMONAVIY TA'LIM MUHITIDA MATEMATIKA VA INGLIZ TILI FANLARINI O'QITISHNING ASOSIY VAZIFALARI

Annotatsiya: *Matematika va ingliz tili fanlarini o`qish insonning intellektini, diqqatini rivojlantiradi, ko'zlangan maqsadga erishish uchun qat'iyat va irodani tarbiyalaydi, algoritmik tarzdagi tartib-intizomlilikni ta'minlaydi va tafakkurini kengaytiradi. Matematika olamni bilishning asosi bo'lib, tevarak-atrofdagi voqea va hodisalarning o'ziga xos qonuniyatlarini ochib berish, ishlab chiqarish, fan-texnika va texnologiyaning rivojlanishida muhim ahamiyatga ega.*
Kalit so'zlar: *matematika o'qitish metodikasi, interfaol metodlar, tashxis, iqtisodiy, siyosiy, huquqiy, tizimli baholash.*

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THE MAIN TASKS OF TEACHING MATHEMATICS AND ENGLISH IN THE MODERN EDUCATIONAL ENVIRONMENT

Abstract: *The science of mathematics develops a person's intellect, attention, cultivates perseverance and willpower to achieve the intended goal, provides algorithmic-style discipline and expands his thinking. Mathematics is the basis of knowledge of the universe, and tevarak-the disclosure of the specific laws of events and phenomena around it, is important in the development of production, science-technology and technology.*
Keywords: *Mathematics teaching methods, interactive methods, diagnostics, economic, political, legal, systemic assessment.*

Amaliy-tajriba va sinov mashqlarida matematika darslarda kundalik faoliyatda shaxsiy, oilaviy va iqtisodiy vaziyatlarga, jumladan, tejamkorlikka, mehnatni yengillashtirishga va unumdorligini oshirishga, savdo-sotiq bilan bog'liq bo'lgan masalalar yechilishi lozim.

Milliy va umummadaniy kompetensiya — vatanga sadoqatli, insonlarga mehr-oqibatli hamda umuminsoniy va milliy qadriyatlarga e'tiqodli bo'lish, badiiy va san'at asarlarini tushunish, orasta kiyinish, madaniy qoidalarga va sog'lom turmush tarziga amal qilish layoqatlarini shakllantirishni nazarda tutadi.

Matematik savodxonlik, fan va texnika yangiliklaridan xabardor bo‘lish hamda foydalanish kompetensiyasi — aniq hisob-kitoblarga asoslangan holda shaxsiy, oilaviy, kasbiy va iqtisodiy rejalarni tuza olish, kundalik faoliyatda turli diagramma, chizma va modellarni o‘qiy olish, inson mehnatini yengillashtiradigan, mehnat unumdorligini oshiradigan, qulay shart-sharoitga olib keladigan fan va texnika yangiliklaridan foydalana olish layoqatlarini shakllantirishni nazarda tutadi. Mazkur kompetensiyalar umumta’lim fanlari orqali o‘quvchilarda shakllantiriladi.

Shuningdek, har bir umumta’lim fanining mazmunidan kelib chiqqan holda o‘quvchilarda fanga oid umumiy kompetensiyalar ham shakllantiriladi.

Boshlang‘ich ta’limda matematika fanini o‘qitishning asosiy vazifalari:

o‘quvchilar tomonidan matematik tushunchalar, xossalar, shakllar, usullar va algoritmlar haqidagi bilim, ko‘nikmalar egallanishini ta’minlash;

inson kamoloti va jamiyat taraqqiyotida matematikaning ahamiyatini anglash, ijtimoiy-iqtisodiy munosabatlar, kundalik hayotda matematik bilim va ko‘nikmalarni muvaffaqiyatli qo‘llashga o‘rgatish;

o‘quvchilarning individual xususiyatlarini rivojlantirgan holda, mustaqil ta’lim olish ko‘nikmalarini shakllantirish;

fanlar integratsiyasini inobatga olgan holda o‘quvchilarda, milliy va umuminsoniy qadriyatlarni, kreativlikni shakllantirish hamda ongli ravishda kasb tanlashga yo‘naltirishdan iborat.

Ushbu o‘quv dasturida boshlang‘ich sinf o‘quvchilarida shakllantiriladigan tayanch va fanga oid kompetensiyalar kiritilgan.

Shuningdek, me’yoriy hujjatlarni yuritishda tayanch va fanga oid kompetensiyalar quyidagicha yozilishi tavsiya qilinadi:

TK - tayanch kompetensiyalar

1. TK1 - kommunikativ kompetensiya
2. TK2 - axborotlar bilan ishlash kompetensiyasi
3. TK3 - o‘zini o‘zi rivojlantirish kompetensiyasi
4. TK4 - ijtimoiy faol fuqarolik kompetensiyasi
5. TK5 - milliy va umummadaniy kompetensiya
6. TK6 - matematik savodxonlik, fan va texnika yangiliklaridan xabardor bo‘lish hamda foydalanish kompetensiyasi.

FK - fanga oid kompetensiyalar

1. FK1 - matematika mazmuniga oid umumiy kompetensiya
2. FK2- kognetiv kompetensiya

O‘quvchilarda shakllantiriladigan tayanch kompetensiya elementlari:

Kommunikativ kompetensiya:

A1

matematikaga oid atamalarning ma’nosini tushunib, to‘g‘ri o‘qiy olish;

so‘z va gaplarni bog‘lagan holda o‘z fikrini aniq va ravshan ifodalay olish;

fikrni mantiqiy izchillikda ifodalay olish;

matematik matn ma’nosini qayta so‘zlab bera olish;

matematik qoidalarni yoddan ayta olish.

matematikaga oid audiomatn, videotasvirlarni tinglab tushuna olish, tegishli munosabat bildira olish.

Ijtimoiy faol fuqarolik kompetensiyasi:

A1

atrofdagilar bilan o‘zaro muloqot chog‘ida odob-axloq qoidalariga rioya qilish va guruhda ishlash;

muammo va tushunmovchiliklar ro‘y bergan paytlarda o‘zini tutishi to‘g‘risida to‘g‘ri qaror qabul qilish.

A1+

matematik qobiliyatini har bir insonning kundalik hayotda uchraydigan muammolarni hal qilish uchun ishlatish.

Milliy va umuminsoniy kompetensiya:

A1

zaminimizda yashab o‘tgan buyuk allomalarimizning matematikaga qo‘sh gan hissalarini tasvirlab berish;

milliy bayramlarimizga oid sana va vaqtlarni bilish, ularni kundalik hayotda qo‘llash;

jamoat joylaridagi odob-axloq qoidalari va an’analarni o‘zlashtirish.

A1+

elementar hodisalarni matematik tilda ifodalash usullaridan foydalanish va bu usullar samarali ekanligini tushunish.

Umumiy o‘rta ta’limning malaka talablari umumta’lim fanlari bo‘yicha ta’lim mazmunining majburiy minimumi va yakuniy maqsadlariga, o‘quv yuklamalari hajmiga hamda ta’lim sifatiga qo‘yiladigan talablardan iborat bo‘lib, u quyidagilardan tashkil topadi:

bilim — o‘rganilgan ma’lumotlarni eslab qolish va qayta tushuntirib berish;

ko‘nikma — o‘rganilgan bilimlarni tanish vaziyatlarda qo‘llay olish;

malaka — o‘rganilgan bilim va shakllangan ko‘nikmalarni notanish vaziyatlarda qo‘llay olish va yangi bilimlar hosil qilish;

kompetensiya — mavjud bilim, ko‘nikma va malakalarni kundalik faoliyatda qo‘llay olish qobiliyati.

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QAYTA TIKLANADIGAN ENERGIYA MANBALARIGA ASOSLANGAN ENERGIYA

Annotatsiya: *Energetika resursi deb – tabiiy yoki sun`iy faollashgan har qanday energiya manbaiga aytiladi. Tabiiy resurslarning tasniflaridan biri – bu turdagi resursning tugallanishi boʻlib, unga muvofiq energetika resurslarini tugallanadigan va tugallanmaydiganlarga boʻlinadi.*

Kalit so'zlar: *Energiya resurslar, Suv energiyasi, termoelektr generatorlar, termoemission generatorlar.*

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ENERGY BASED ON RENEWABLE ENERGY SOURCES

Abstract: *Energy resource means any natural or artificially activated energy source. One of the classifications of natural resources is the completion of this type of resource, according to which energy resources are divided into renewable and non-renewable.*

Key words: *Energy resources, Water energy, thermoelectric generators, thermoemission generators.*

Oʻz navbatida, tugallanadiganlar tiklanuvchi va tiklanm1aydigan boʻlishi mumkin. Tiklanuvchilarga tabiat (yer, oʻsimliklar, hayvonlar va h.k.) tomonidan tiklanadigan rusurslar kiradi, tiklanmaydiganlarga – tabiat tomonidan bir necha asrlar davomida toʻplangan lekin, yangi geologik sharoitlarda hosil boʻlmaydigan resurslar (neft, koʻmir va boshqa yer osti zaxiralari) kiradi. Tugallanmaydiganlariga quyosh, shamol, kosmik, iqlimiy va suv resurslari kiradi.

Energiya resurslarining barcha turlaridan quyosh energiyasi muhim ahamiyatga ega. Energiya resurslarining barcha turlari quyosh energiyasini tabiiy oʻzgartirish natijasidir. Koʻmir, neft, tabiiy gaz, torf, yonuvchi togʻ jinslari va oʻtinlar – bu oʻsimliklar tomonidan olingan va oʻzgartirilgan quyoshning nurli energiyasi zaxiralaridir. Surat sintezi (fotosintez) reaksiyasi jarayonida atrof-muhitning noorganik elementlaridan, ya`ni, suv (H2O) va karbonot angidrit gazi SO2 lardan quyosh nuri ta`sirida o‘simliklarda asosiy elementi uglerod (S) bo‘lgan organik modda hosil bo‘ladi.

Suv energiyasi ham suvni bug‘lantiradigan va bug‘ni atmosferaning yuqori qatlamlariga ko‘taradigan quyosh energiyasi hisobiga hosil bo‘ladi.

Shamol, quyosh tomonidan bizning sayyoramizni turli nuqtalarini turli harorat hisobiga isitish natijasida hosil bo‘ladi, ya‘ni issiq va sovuq havo qatlamining siqilishi evaziga sodir bo‘ladi. Bundan tashqari quyoshning yer sathiga to‘g‘ri keladigan bevosita nurlantirishi, katta energiya imkoniyatiga egadir.

Bizning iqlim sharoitimizda quyosh energiyasidan ko’proq foydalanish maqsadga muvofiqdir. SHu maqsadda quyosh energiyasidan foydalanish bo’yicha ilmiy tadqiqotlar olib borilmoqda. Muntazam takrorlanuvchi energiya manbalariga asosan ishlatilgan energiya o’rnini tabiiy ravishda qayta (takroran) to’ldirib boradigan energiya xosil bo’lish jarayonini ta’minlovchi tabiat resurslari kiradi. Masalan, suv, quyosh, shamol energiyalari va boshqalar. Suyultirilgan kompostdan ajralib chikuvchi gaz ham muntazam takrorlanuvchi energiya manbasi bo’lishi mumkin. Go’zaning poyasi ham muntazam takrorlanuvchi energiya resursi bo’la oladi. Har yili yangi ekilgan o’simlikdan poyani olish imkoni bor. Ammo bu energetik resursni xam oxirgi vaktlarda kurilish materiallari va kogoz tayyorlash uchun dalalardan yigib olinmokda.

Muntazam takrorlanuvchi energiya zaxiralarining afzalliklaridan biri va asosiysi ularning ekologiyaga zararli ta’sirining kamligidir. Bu energetik resurslar qayta tiklanishi bilan tavsiflanadi.

Ko’mir, neft va tabiiy gaz zaxiralari chegaralangan bo’lib, sarflangan zaxiraning o’rni qoplanmaydi. Chunki yer osti yoqlarilgi zaxiralari millionlab yillar davomida o’tgan evolyutsion jarayon ta’sirida hosil bulgandir. Shuning uchun xam bu zaxiralarni tejab ishlatish zarur.

Muntazam takrorlanuvchi energiya manbalarini doimo tabiatning o’zi hosil qilib turadi.Faqat ulardan samarali foydalanishni tashkil etish zarur.

Hozirgi vaqtda issiqlikni to’g’ridan-to’g’ri, harakatlanuvchi mexanik detallarni qo’llamasdan, elektr energiyasiga aylantiruvchi qurilmalar tadqiq qilinmoqda.

Elektr energiyasi hosil qilishning quyidagi zamonaviy usullari mavjud:

- energiyani magnit gidrodinamikli o’zgartgichlar (o’zgarmas magnitlar orasidan zaryadli zarrachalarni katta tezlikda oqib o’tishi natijasida elektr energiyasini hosil qilishga asoslangan);
- termoelektr generatorlar (1921 yilda kashf etilgan Zeebek samarasiga asoslanib, ya’ni bir uchlari issik kavsharlangan, ochiq qolgan uchlarida esa harorat ta’sirida E.Yu.K. hosil qiladigan turli xil metallardan tayyorlangan juftlikka asoslangan);
- radioizotopli energiya manbalari (yadro yemirilishida zarrachalar va kvantlarning kinetik energiyasi ajralishi bilan kechadi va bu harorat muxitga yutiladi hamda bu muxitni qizdiradi. Mazkur qizishni termoelektrik yo’l bilan elektr energiyasi hosil qilishda ishlatiladi);

- termoemission generatorlar (ushbu xodisaga 1883 yilda T.Edison asos solgan bo'lib, anod va katodlardagi harorat uzgarishi natijasida elektr energiyasi hosil qilishga asoslangan);

- elektrokimyoviy generatorlar (kimyoviy energiyani tugridan-tugri elektr energiyasiga aylantiruvchi kurilma);

- geotermal elektr stansiyalari (bu stansiyalar energiya manbai sifatida Yer qa'ridagi issiqlikni ishlatadi);

- muntazam takrorlanuvchi dengiz zaxiralaridan foydalanish. Dengiz zaxiralari uchga bo'linadi: 1) vertikal termogradiyentlar va okean shamollari; 2) dengiz biomassalari va geotermal suvlar; 3) yuzadagi to'lqinlar va oqimlar. Eng katta energiya vertikal termogradiyent ta'sirida, ya'ni suv satxidagi va tik o'q bo'yicha dengiz quvuridagi haroratlar farqi xisobiga suyuq ammiakni xarakatlantirib, turbina o'qini aylantirib elektr energiyasi ishlab chiqarishga asoslangan;

- quyosh elektr stansiyalari;

- termoyadro reaksiyasi va reaktor-ko'paytirgichlarning energiyasidan foyda-lanish va boshqa usullar kiradi. Energoresurslar bu insonlar o'z manfaati uchun foydalanishi mumkin bo'lgan energiya manbalaridir.

Ayni damda resurslarni tejash va ulardan oqilona foydalanish kun tartibining dolzarb masalalaridan biri hisoblanadi. Shuning uchun muqobil energiyadan foydalanish to'g'ri qaror hisoblanadi. AQSH va yevropa davlatlarida quyosh energiyasidan foydalangan holda suv isitish texnologiyasi uzoq vaqtdan beri qo'llanilmoqda.

Yevropa Ittifoqi davlatlarida quyosh energiyasidan foydalanish hajmi sezilarli darajada jadallashdi. Ayniqsa, iqlimi birmuncha issiq bo'lgan mamlakatlarda, xususan, Germaniya, Belgiya, Gretsiya, Italiya, Ispaniyada bu sohada ma'lum darajada tajriba ham to'plangan. Shuningdek, Xitoy, Turkiya, Lyuksemburg va Daniya kabi davlatlarda ham bu masalaga alohida e'tibor qaratilyapdi. Isroilda esa quyosh energiyasidan oqilona foydalaniladi. Mamlakatning istalgan hududidagi uylar tomlarida o'rnatilgan suv isitgichlari bunga yaqqol misoldir. Bunday maishiy ehtiyojdagi qurilmalar 150 litr sig'imga ega bo'lib, quyosh batareyasidan energiya olib, suvni isitadi. Shu tarzda bunday qurilma sohibi yiliga taxminan 2000 kVt/soat elektr energiyasini tejash imkoniga ega bo'ladi.

Respublikamizdagi qayta tiklanadigan energiya manbasining imkoniyatlari 1.2-jadvalda ko‘rsatilgan.

Ko‘rsatkichlar	Jami (mln.t.n.e.)	Shu jumladan, energiya (mln.t.n.e.)			
		Gidro	Quyosh	Shamol	Biomassa
Yalpi[1]	50984,6	9,2	50973	2,2	–
Texnik[2]	179	1,8	176,8	0,4	0,3
O‘zlashtirilgan	0,6	0,6	–	–	–

1 –belgilangan hududga tushadigan yoki hosil qilinadigan nazariy energiya miqdori.
2– yalpi imkoniyatlarni amalga oshirib, foydalanish mumkin bo‘lgan mavjud texnologiyaning bir qismi.

ФОЙДАЛАНИЛГАН АДАБИЁТЛАР РЎЙҲАТИ

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TOURIST POTENTIAL OF SURKHANDARYA REGION AND OPPORTUNITIES FOR ITS DEVELOPMENT

Abstract: *This article presents ideas and comments on the importance of tourism in the Surkhandarya region, including work to develop regional tourism, as well as the historical and cultural heritage sites of the region. The potential of some existing archaeological, architectural and monumental sites in the area of Termez and Old Termez for the development of tourism is considered.*

Key words: *tourism, historical and cultural heritage, monument, pilgrimage tourism, archaeological tourism.*

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SURXONDARYO VILOYATINING TURIZM SALOHIYATI VA UNI RIVOJLANTIRISH IMKONIYATLARI

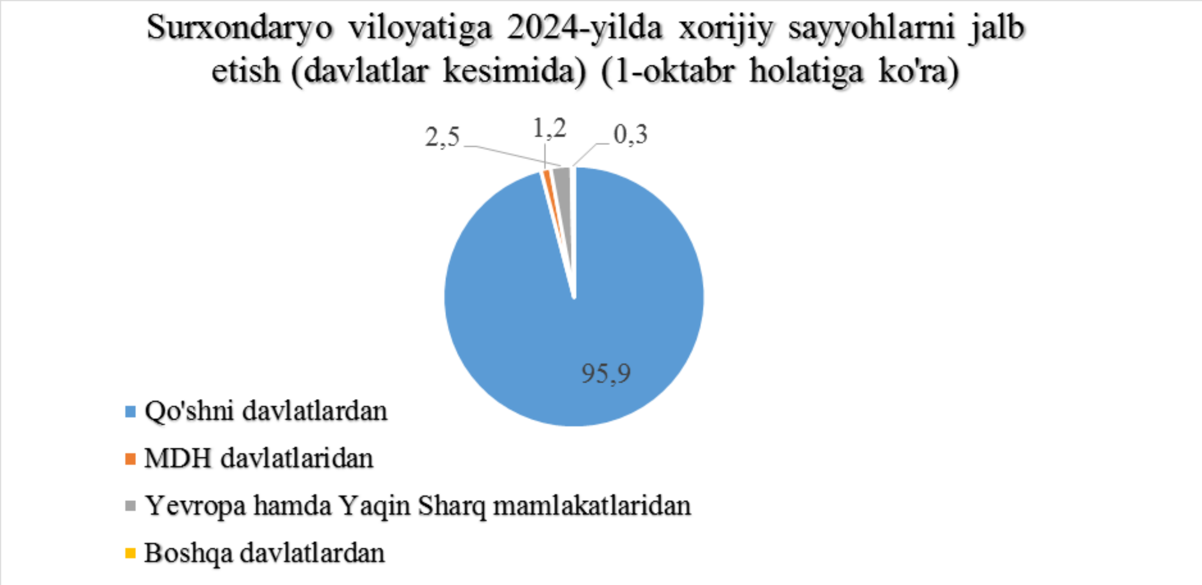
Annotatsiya: *Ushbu maqolada Surxondaryo viloyati turizmining ahamiyati, shu jumladan, viloyat turizmini rivojlantirish borasidagi ishlar, hududning tarixiy-madaniy meros obyektlari haqida fikr va mulohazalar keltirilgan. Termiz va Eski*

Termiz hududidagidagi mavjud ba'zi arxeologik, arxitektura hamda monumental obyektlarning turizmni rivojlantirishdagi imkoniyatlari ko'rib chiqilgan.

Kalit so'zlar: *turizm, tarixiy-madaniy meros, monument, ziyorat turizmi, arxeologik turizm.*

Mamlakat iqtisodiyotida turizmni strategik darajaga koʻtarish, ichki turizm xizmatlarini diversifikatsiya qilish va hajmini keskin koʻtarish, mamlakat fuqarolarini respublikaning turizm salohiyati bilan tanishtirish maqsadida Oʻzbekiston Respublikasi Prezidentining 2022-yil 28-yanvardagi "2022-2026-yillarga moʻljallangan Yangi Oʻzbekistonning taraqqiyot strategiyasi toʻgʻrisida"gi PF-60-son [1] hamda ushbu farmonning "Insonga e'tibor va sifatli ta'lim yili"da amalga oshirishga oid davlat dasturi toʻgʻrisida" 2023-yil 28-fevraldagi PF-27-son farmonlarining 35-maqsadiga binoan ichki turizm salohiyatini targʻib qilish orqali 2024-yilda "Oʻzbekiston boʻylab sayohat qil!" dasturi doirasida mahalliy sayyohlar sonini 1,8 mln. nafardan oshirish, Oʻzbekiston Respublikasi Prezidentining 2024-yil 21-fevraldagi "Oʻzbekiston – 2030" strategiyasini "Yoshlar va biznesni qoʻllab-quvvatlash yili"da amalga oshirishga oid davlat dasturi toʻgʻrisida"gi PF-37-sonli Farmonining 2–ilovasi [2] bilan tasdiqlangan "Oʻzbekiston – 2030" strategiyasining barqaror iqtisodiy oʻsish orqali aholi farovonligini ta'minlash yoʻnalishi boʻyicha 2024-yilga moʻljallangan amaliy tadbirlar rejasi"ning 73-bandida Xorijiy turistlar sonini 500 ming nafarga yetkazish vazifasi belgilab berilgan. Shuningdek, mazkur strategiyaning 75-bandida ichki sayyohlar sonini 1,65 mln.nafarga, ziyorat turizmi boʻyicha keladigan turistlar sonini 50 ming nafarga yetkazish hamda "Oʻzbekiston-2030" strategiyasi toʻgʻrisida" 2023-yil 11-sentabrdagi PF-158-son farmoni [3] va "Oʻzbekiston-2030" strategiyasini 2024-yilda sifatli va oʻz vaqtida amalga oshirish chora-tadbirlari toʻgʻrisida" PQ-300-son qarorining 58-maqsadiga binoan Oʻzbekistonda tashqi va ichki turizmni rivojlantirish uchun keng sharoitlar yaratish orqali sayyohlar sonini oshirish uchun 2024-yilda ichki sayyohlar sonini 21 millionga yetkazish, Oʻzbekiston Respublikasi Prezidenti rahbarligida 2024-yil 3-iyun kuni kengaytirilgan tarzda oʻtkazilgan videoselektor yigʻilishining 28-son bayoni, 10-bandida "Joriy yilda 11mln nafar xorijiy sayyohlarni jalb etish va turizm eksportini 2,5 mlrd dollarga yetkazish" boʻyicha bir qator majburiyatlar yuklatilgan, shuningdek, Surxondaryo viloyatt hokimi tomonidan viloyatga tashrif buyuruvchi xorijiy sayyohlar hajmini koʻpaytirish maqsadida qator chora-tadbirlar rejalashtirilgan.

Jumladan, 2024-yilda (yanvar-sentabr) Surxondaryo viloyatiga tashrif buyuruvchi xorijiy sayyohlar hajmi jami 480100 kishiga koʻtarilgan, shulardan, 1898 kishi Angor tumaniga, 1851 kishi Bandixon tumaniga, 29894 kishi Boysun tumaniga 140362 kishi Denov tumaniga, 2633 kishi Jarqoʻrgʻon tumaniga, 2058 kishi Qiziriq tumaniga, 5739 kishi Qumqoʻrgʻon tumaniga, 801 kishi Muzrabot tumaniga, 8724 kishi Oltinsoy tumaniga, 72743 kishi Sariosiyo tumaniga, 191791 kishi Termiz shahriga, 4426 kishi Termiz tumaniga, 11851 kishi Uzun tumaniga, 3341 kishi Sherobod tumaniga 1988 kishi Shoʻrchi tumaniga jalb qilingan [8].



1-rasm. Surxondaryo viloyatiga xorijiy sayyohlarning tashrifi

Surxondaryo viloyati Turizm boshqarmasi ma'lumotlari asosida mualliflar tomonidan ishlab chiqilgan

Shu jumladan, qo'shni davlatlarga Tojikiston, Afg'oniston, Qozog'iston, Qirg'iziston davlatlari, MDH davlatlariga Rossiya, Moldova, Ozarbayjon davlatlari, Yevropa davlatlariga Buyuk Britaniya, Fransiya davlatlari, Yaqin sharq mamlakatlariga Xitoy, Yaponiya, Indoneziya, Pokiston, Hindiston davlatlari kiradi.

2023-yil 1-yanvar holatiga ko 'ra, viloyatda jami 561 ta moddiy-madaniy meros obyektlari mavjud. Shulardan: areologiya yodgorliklari – 444 ta, arxitektura yodgorliklari – 36 ta, diqqatga sazovor joylar – 42 ta, monumental san'at yodgorliklari – 39 tani tashkil etadi.

Surxondaryo viloyatining moddiy-madaniy obyektlar ro'yxati (tumanlar kesimida)

1-jadval

№	Tumanlar nomi	Moddiy-madaniy obyektlar				
		Jami	Arxeologiya yodgorliklari	Arxitektura yodgorliklari	Monumental san'at yodgorliklari	Diqqatga sazovor joylar
1	Angor	21	20	1		
2	Boysun	71	50	3	2	16
3	Denov	91	74	2	8	7
4	Jarqo'rg'on	23	19	2	2	
5	Qiziriq	21	17	1	3	
6	Qumqo'rg'on	7	5	2		
7	Oltinsoy	41	35	1		5
8	Muzrabot	11	10	1		

9	Sariosiyo	33	29			4
10	Sherobod	99	85	2	7	5
11	Termiz t	44	30	14		
12	Uzun	28	26	1	2	
13	Sho‘rchi	61	44		12	5
14	Termiz sh	9		6	3	

Manba: Surxondaryo viloyati Turizm boshqarmasi [8]

Viloyatdagi ba‘zi bir tarixiy-madaniy yodgorliklarga e’tibor qaratadigan bo‘lsak, ular o‘ziga xos xududiy geografik joylashganligiga amin bo‘lamiz. Surxondaryo viloyati hamda Termiz shahri va eski Termiz hududlaridagi tarixiy-madaniy ob’ektlarda ham turizmni rivojlantirish istiqbollari mavjud [5]. Bu sharoitlardan unumli foydalanib, uni kelajakda istiqbolli qo‘llash muhim sanaladi

Angor tumanidagi Zartepa yodgorligi (mil.avv.IV-II asrlar) – Termiz shahridan 26 km shimoli-g‘arbda joylashgan qadimgi shahar xarobasi. Zartepa 1951-52 yillarda arxeolog L.I.Al-Baum tomonidan tekshirilgan. Zartepa kvadrat shaklida bo‘lib, devorlarining uzunligi 400 m dan, sharqiy devor xarobalari 6-7 m, g‘arbiy devori 4 m gacha saqlanib qolgan [7].

Bolaliktepa – VI-VII asrlarga mansub katta yer egasi (dehqon) ko‘shki qarorgohi. Toshkent-Termiz avtomobil yo‘lidan 2 km shimoli-sharqda joylashgan. Vatanimiz hududidagi jahonga mashhur arxeologik yodgorliklaridan biri. Bolaliktepa ilk bor arxeolog L.I.Albaum tomonidan 1953-56 yillarda to‘liq qazib ochilgan.

Angor tumanidagi Qo‘rg‘on yodgorligi (milodiy V-VII asrlar) – katta yer egasi qarorgohi, Zartepadan 3 km sharqda joylashgan.Tomonlari 30x24 m, balandligi 10 m atrofida. XX asrning 70-yillarida arxeolog T.Annayev tomonidan ko‘shkning ikkinchi qavatida qisman arxeologik qazuv ishlari olib borilgan.

Angor tumanidagi Qo‘rg‘on yodgorligi (milodiy V-VII asrlar)

Muzrabod tumanidagi Kampirtepa yodgorligi (mil.avv.III asr)

Boysun tumanidagi Machay g‘ori (mil.avv. 12-6 ming yillik)

Denov tumanidagi Said otaliq madrasasi (XVI asr)

2-rasm. Surxondaryo viloyatidagi ba’zi tarixiy-madaniy yodgorliklar

Xayrabodtepa – Kushon davriga oid shahar-qal’a, mil.avv. I asrda asos solingan. Angor markazidan janubiy tarafda Xayrabod qishlog‘ida joylashgan. Yodgorlikda ilk bora arxeologik tadqiqotlar XX asrning 50-yillarida arxeolog L.I.Albaum tomonidan amalga oshirilgan.

Muzrabod tumanidagi Sopollitepa yodgorligi (mil.avv.XVII-XV asrlar) – Sherobod cho‘lini kesib o‘tgan Ulanbuloqsoy yoqasiga joylashgan jez (bronza) davriga oid yodgorlik. U 1968 yil arxeolog L.I.Albaum tomonidan topilgan. 1969-74 yillarda A.Asqarov tomonidan o‘rganilgan.

Kampirtepa yodgorligi (mil.avv.III asr) – Amudaryoning o‘ng sohilida Termizdan 30 km g‘arbda joylashgan qadimgi shahar xarobasi. Yunon-Baqtriya podsholigi davrida Kampirtepa nafaqat shahar, balki harbiy garnizon vazifasini ham bajargan va XV asr muarrihi Xofizu Obro‘ asarida Jayxun bo‘yidagi “Pandaxeyon” nomi ostida eslab o‘tilgan.

Jarqo‘ton qal’asi – mil.avv XVII-X asrlar oralig ‘ida shakllangan Sopolli madaniyatining noyob yodgorliklaridan biri Jarqo‘ton qal’asidir. Bronza davrida bunyod qilingan qadimiy qal’alari orasida Sherobod tumani hududida joylashgan mil.avv.XV-XIV asrlarga oid ilk shahar ko‘rinishidagi Jarqo‘ton qal’asi o ‘ziga xos mavqeyi, qurilish uslubi bilan ham ajralib turadi.

Surxondaryo viloyatida turizm sohasini jadal rivojlantirish uchun qulay iqtisodiy, ma’muriy va huquqiy muhitni yaratgan holda, eng samarali tartibni joriy etish, hududlarning iqtisodiy salohiyati va daromadlari bazasini kengaytirish, yangi ish o‘rinlarini yaratish, vohamizga keladigan turistlar oqimini ko‘paytirish, shuningdek, milliy turizm mahsulotlarini jahon bozorida faol va kompleks ilgari surish bo‘yicha ishlarni amalga oshirish zaruratini keltirib chiqaradi.

Foydalanilgan adabiyotlar ro’yxati:

1. O‘zbekiston Respublikasi Prezidentining 2022-yil 28-yanvardagi “2022 — 2026-yillarga mo‘ljallangan Yangi O‘zbekistonning taraqqiyot strategiyasi to‘g‘risida”gi PF-60-son Farmoni.

2. Oʻzbekiston Respublikasi Prezidentining 2024-yil 21-fevraldagi “Oʻzbekiston – 2030” strategiyasini “Yoshlar va biznesni qoʻllab-quvvatlash yili”da amalga oshirishga oid davlat dasturi toʻgʻrisida”gi PF-37-sonli Farmoni.
3. Oʻzbekiston Respublikasi Prezidentining 2023-yil 11-sentyabrdagi “Oʻzbekiston — 2030” strategiyasi toʻgʻrisidagi PF-158-son Farmoni.
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BIRLASHGAN MILLATLAR TASHKILOTINING GLOBAL TINCHLIKNI TA'MINLASH FAOLIYATI VA ISTIQBOLI

Annotatsiya: *Birlashgan Millatlar Tashkiloti 1945 yilda, Ikkinchi jahon urushidan keyin, xalqaro tinchlik va xavfsizlikni ta'minlash maqsadida tashkil etilgan. BMTning asosiy vazifalaridan biri – urush va mojarolarni oldini olish, tinchlikni saqlash va xalqaro hamkorlikni rivojlantirishdir. Tashkilotning global tinchlikni ta'minlash faoliyati, asosan, tinchlikni saqlash operatsiyalari, diplomatik muzokaralar, inson huquqlarini himoya qilish va ijtimoiy rivojlanish kabi sohalarda amalga oshiriladi.*

Kalit so'zlar: *tinchlik, diplomatik muzokaralar, tashkilotlar, xalqaro hujjatlar, konvensiyalar, mojarolar, xalqaro hamkorlik.*

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UNITED NATIONS ACTIVITIES AND PROSPECTS FOR GLOBAL PEACE

Abstract: *The United Nations was established in 1945, after the Second World War, to ensure international peace and security. One of the main tasks of the UN is to prevent war and conflicts, maintain peace and develop international cooperation. The organization's global peacekeeping activities are mainly carried out in areas such as peacekeeping operations, diplomatic negotiations, human rights protection and social development.*

Key words: *peace, diplomatic negotiations, organizations, international documents, conventions, conflicts, international cooperation.*

KIRISH

BMTning tinchlikni saqlash operatsiyalari, tashkilotning eng ko'zga ko'ringan va muhim faoliyatlaridan biridir. Ushbu operatsiyalar, mojarolar yuzaga kelgan hududlarda tinchlikni saqlash va barqarorlikni tiklash maqsadida amalga oshiriladi. Tinchlikni saqlash kuchlari, BMTga a'zo davlatlar tomonidan yuborilgan askarlardan tashkil topadi. Ularning vazifalari, mojarolarni oldini olish, tinch aholini himoya qilish va muammolarni hal etishda yordam berishdan iboratdir. BMTning tinchlikni saqlash operatsiyalari, ko'plab mamlakatlarda, masalan, Kongo, Mali, Sudan va boshqa joylarda amalga oshirilmoqda. Ushbu operatsiyalar, ko'pincha xalqaro hamkorlik va ko'mak bilan amalga oshiriladi, chunki tinchlikni ta'minlashda faqat BMTning kuchlari emas, balki mahalliy va xalqaro tashkilotlar ham ishtirok etishi zarur.

ADABIYOTLAR TAHLILI VA TADQIQOT METODOLOGIYASI

BMTning diplomatik faoliyati, mojarolarni hal etish va tinchlikni saqlashda muhim ahamiyatga ega. Tashkilot, turli davlatlar o‘rtasidagi muloqotni rivojlantirish va diplomatik yechimlarni izlashda yordam beradi. BMTning Xalqaro tinchlik va xavfsizlik kengashi, bu jarayonda muhim rol o‘ynaydi. Kengash, a'zo davlatlar o‘rtasida kelishmovchiliklarni hal etish, tinchlikni ta'minlash va xavfsizlikni oshirishga qaratilgan qarorlar qabul qiladi. Diplomatik faoliyat, ko‘pincha xalqaro muammolarni hal etish va tinchlikni saqlashda muhim vosita bo‘lib xizmat qiladi. BMT, shuningdek, mojarolarni hal etishda mediator sifatida ham ishtirok etadi va taraflar o‘rtasida kelishuvga erishishga yordam beradi. Inson huquqlarini himoya qilish, BMTning yana bir muhim vazifasidir. Tashkilot, inson huquqlarini himoya qilish va rivojlantirishga qaratilgan ko‘plab tashabbuslarni amalga oshiradi. BMTning Inson huquqlari kengashi, inson huquqlarini buzilishlarini kuzatish va ularni bartaraf etish maqsadida faoliyat yuritadi. Tashkilot, shuningdek, inson huquqlarini himoya qilishga qaratilgan xalqaro hujjatlar va konvensiyalarni ishlab chiqadi va ularni amalga oshirishda yordam beradi. Inson huquqlari masalasi, tinchlikni ta'minlashda muhim ahamiyatga ega, chunki inson huquqlarining buzilishi ko‘pincha mojarolar va urushlarga olib keladi.[1]

MUHOKAMA VA NATIJALAR

BMTning global tinchlikni ta'minlash faoliyati, ko‘plab muvaffaqiyatlarga erishgan bo‘lsa-da, ba'zi muammolar va qiyinchiliklarga ham duch kelmoqda. Tinchlikni saqlash operatsiyalari, ko‘pincha resurslar yetishmasligi, siyosiy qarama-qarshiliklar va a'zo davlatlarning o‘zaro kelishmovchiliklari tufayli samarali bo‘lmaydi. Ba'zi hollarda, BMTning tinchlikni saqlashdagi roli, cheklangan bo‘lishi mumkin, chunki u faqat BMTga a'zo davlatlarning roziligi bilan harakat qilishga haqli. Bu, ayniqsa, kuchli davlatlar o‘rtasidagi kelishmovchiliklar va siyosiy qarama-qarshiliklar mavjud bo‘lganda, BMTning ishini murakkablashtiradi. BMTning global tinchlikni ta'minlash istiqboli, dunyo bo‘ylab tinchlik va barqarorlikni saqlashga qaratilgan yangi strategiyalar va tashabbuslarni ishlab chiqishni talab etadi. Bugungi kunda, global muammolar, masalan, iqlim o‘zgarishi, terrorizm, migratsiya va iqtisodiy tengsizlik, tinchlikni ta'minlashda yangi chaqiriqlarni keltirib chiqarmoqda. BMT, ushbu muammolarni hal etishda faol ishtirok etishi va yangi yechimlar izlashda davom etishi zarur. Iqlim o‘zgarishi, masalan, ko‘plab mamlakatlarda resurslar yetishmasligi va muhojirlikni keltirib chiqaradi, bu esa ijtimoiy va siyosiy mojarolarga olib kelishi mumkin.[2]

Tinchlikni ta'minlashda xalqaro hamkorlikni oshirish, BMTning istiqbolidagi muhim jihatlardan biridir. Tinchlikni saqlashda faqat BMTga a'zo davlatlar emas, balki boshqa xalqaro tashkilotlar, nodavlat tashkilotlar va fuqarolik jamiyati ham ishtirok etishi kerak. Ushbu hamkorlik, global muammolarni hal etishda samarali yechimlarni topishga yordam beradi va tinchlikni ta'minlashda yangi imkoniyatlar yaratadi. Xalqaro hamkorlik, shuningdek, resurslarni birlashtirish va tajriba almashish imkoniyatini yaratadi, bu esa tinchlikni ta'minlashda yanada samarali bo‘lish imkonini beradi. BMTning global tinchlikni ta'minlash faoliyatini yanada kuchaytirish uchun, tashkilotning resurslarini oshirish, tinchlikni saqlash kuchlarini kuchaytirish va yangi strategiyalar ishlab chiqish zarur. Shuningdek, BMTga a'zo davlatlar, o‘zaro kelishuv va hamkorlikni rivojlantirishga e'tibor berishlari kerak. Bu, nafaqat tinchlikni ta'minlash, balki global rivojlanishni ham qo‘llab-quvvatlashga yordam beradi. Tinchlikni ta'minlashda, barcha qatnashchilar o‘rtasida tenglik va adolatni ta'minlash zarur. Bu, ijtimoiy muammolarni hal etishda va tinchlikni saqlashda muhim ahamiyatga ega. BMTning global tinchlikni ta'minlash faoliyati, shuningdek, ijtimoiy adolat va tenglikni ta'minlashga qaratilgan.[3]

Tinchlikni saqlashda, barcha qatnashchilar o‘rtasida tenglik va adolatni ta'minlash zarur. Bu, ijtimoiy muammolarni hal etishda va tinchlikni saqlashda muhim ahamiyatga ega. BMT, ijtimoiy adolat va tenglikni ta'minlashga qaratilgan dasturlarni amalga oshirishda davom etishi kerak. Tinchlikni ta'minlashda, BMTning roli va vazifalari, kelajakda ham muhim ahamiyatga ega bo‘lishi kutilmoqda. Global tinchlikni ta'minlashda BMTning faoliyati, xalqaro hamkorlik va o‘zaro tushunishni rivojlantirish orqali yanada samarali bo‘lishi mumkin. Tinchlikni saqlashda, barcha davlatlar o‘zaro kelishuv va hamkorlikni rivojlantirishga qaratilgan harakatlarni amalga oshirishlari zarur. BMT, kelajakda ham tinchlikni ta'minlash va insoniyat rivojlanishiga hissa qo‘shishda davom etishi zarur. [4]

Birlashgan Millatlar Tashkiloti inson huquqlarini himoya qilishda muhim rol o‘ynaydi. Tashkilot, xalqaro standartlarni belgilash, monitoring va hisobotlar tayyorlash, maxsus vakillar tayinlash va ta'lim dasturlarini amalga oshirish orqali inson huquqlarini himoya qilishga intiladi. BMTning faoliyati, inson huquqlarini hurmat qilish va ularni himoya qilishda davlatlarning mas'uliyatini oshiradi. Kelajakda BMT, inson huquqlarini himoya qilishda o‘z rolini yanada kuchaytirishi zarur, chunki inson huquqlari har bir insonning asosiy huquqi bo‘lib, ularni himoya qilish global barqarorlik va tinchlikni ta'minlashda muhimdir.[5]

XULOSA

Xulosa qilib aytganda, Birlashgan Millatlar Tashkiloti, global tinchlikni ta'minlashda muhim rol o‘ynaydi. Tashkilotning faoliyati, tinchlikni saqlash operatsiyalari, diplomatik muzokaralar va inson huquqlarini himoya qilish orqali amalga oshiriladi. Biroq, BMTning tinchlikni ta'minlashdagi roli, ba'zi muammolar va qiyinchiliklarga duch kelmoqda. Tinchlikni ta'minlashda xalqaro hamkorlikni oshirish, yangi strategiyalar ishlab chiqish va ijtimoiy adolatni ta'minlash, BMTning istiqbolidagi muhim jihatlardir. BMT, kelajakda ham tinchlikni ta'minlash va insoniyat rivojlanishiga hissa qo‘shishda davom etishi zarur.

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MOLIYAVIY HISOBOTLARDA TOVAR-MODDIY ZAXIRALARNI TAHLIL QILISH USLUBIYOTI MASALALARI

Annotatsiya. *Mazkur maqolada buxgalteriya hisobi tizimida kunning eng dolzarb bo'lib turgan O'zbekiston Respublikasi Prezidentining 2020 yil 24 fevraldagi 4611-sonli "Moliyaviy hisobotning xalqaro standartlariga o'tish bo'yicha qo'shimcha chora-tadbirlar to'g'risida" qarori ijrosini ta'minlashga qaratilgan, korxonalarning iqtisodiy faoliyatida muhim ahamiyatga ega bo'lgan mablag'lardan tovar-moddiy zaxirlarni hisobini tashkil etishda xorijiy davlatlarda qo'llanilayotan me'yoriy hujjatlar va uslubiyotlar haqida keng to'xtalib o'tiladi.*

Kalit so'zlar. *tovar-moddiy zaxira, tan olish, baholash, xalqaro standartlar, moliyaviy hisobot.*

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ISSUES OF METHODOLOGY FOR ANALYZING COMMODITY AND MATERIAL RESERVES IN FINANCIAL STATEMENTS

Annotation. *This article focuses on ensuring the implementation of the decree of the president of the Republic of Uzbekistan dated February 24, 2020 No. 4611 "on additional measures for the transition to International Financial Reporting Standards", which is the most relevant of the day in the accounting system, and extensively discusses the regulatory documents and methods used in foreign countries in the organization of.*

Keywords. *commodity-material reserve, recognition, assessment, international standards, financial reporting.*

Moliyaviy hisobotlarda tovar-moddiy zaxiralarni tahlil qilishda asosan moliyaviy tahlilning umumiy belgilangan uslubiyoti tadqiq etiladi.

Bugungi kunda moliyaviy tahlilni tashkil etish yuzasidan me'yoriy tartiblarning turlicha bo'lganligi sababli, uni tashkil etishda an'anaviy usullar va yo'nalishlardan keng foydalanib kelinmoqda. Tovar-moddiy zaxiralarni tahlili moliyaviy holat bo'yicha ko'rsatkichlar tarkibida ifodalaniladi. M.Raximovning fikricha: "Moliyaviy holat tahlili oldiga qo'yiladigan asosiy vazifalarni manbalarga tayangan holda umumlashtiriladi va tarkiblanadi".

Tovar-moddiy zaxiralar tahlilida moliyaviy tahlilning joriy (operativ) moliyaviy tahlil alohida ahamiyat kasb etadi. Tahlilning mazkur usuli tovar-moddiy zaxiralar bo'yicha rejalarni bajarilishida yoki tovar-moddiy zaxiralar bilan bog'liq muamalalarni amalga oshirishda tezkor, ya'ni operativ koʻrinishda tovar-moddiy zaxiralarning moliyaviy holatga ta'sir etish yuzasidan oʻtkazib boriladi.

Tovar-moddiy zaxiralar tahlilni tashkil etish quyidagi bosqichlarda oʻtkazish maqsadga muvofiq deb oʻylaymiz.

birinchi, tovar-moddiy zaxiralar tahlili maqsadini belgilash va rejasini tuzish;

ikkinchi, tovar-moddiy zahirlar tahlili yuzasidan ma'lumotlar bazasini toʻplash;

uchinchi, tovar-moddiy zaxiralar tahlilni bevosita oʻtkazish tartibi;

toʻrtinchi, tovar-moddiy zaxiralar tahlili natijalarini umumlashtirish va rasmiylashtirish;

beshinchi, tovar-moddiy zaxiralar tahlili boʻyicha qarorlar tayyorlash;

oltinchi, tovar-moddiy zaxiralar tahlili natijalarini realizatsiya qilish.

Tovar-moddiy zaxiralarni tahlil qilishda axborot manbai boʻlgan buxgalteriya balansida ular *"Moliyaviy boʻlmagan aktivlarning moliyaviy boʻlmagan joriy aktivlari"* sifatida tasniflanadi.

Olib borilgan tadqiqotlarda tovar-moddiy zaxiralarni gorizontal va vertikal usullarida tahlil qilinib, olingan natijalar boʻyicha ilmiy xulosalar berildi. Tovar-moddiy zaxiralarni gorizontal tahlili bu mazkur zaxiralar boʻyicha koʻrsatkichlarni oʻzaro taqqoslash orqali ularning holatdagi oʻzgarishlarga baho beriladi. Shuningdek, tovar-modiy zaxiralarni gorizontal tahlil asosida ularning oʻzgarishiga mutlaq va nisbiy ifodalarda ham baho berish imkoniyatiga ega boʻlinadi.

Tovar-moddiy zahirlarani gorizontal tahlilni quyidagi shakllaridan amalga oshirish mumkin:

- tovar-moddiy zaxiralar boʻyicha hisobot koʻrsatkichlarini davr boshiga va oxiriga taqqoslash;
- tovar-moddiy zaxiralar boʻyicha hisobot koʻrsatkichlarini oʻtgan yilning shu davri koʻrsatkichlari bilan taqqoslash;

Olib borilgan tadqiqotlar natijasida quyida "Jizzaxdonmahsulotlari" AJda tovar-moddiy zaxiralar va ular tarkibi oʻzgarishi dinamik koʻrsatkichlari tahlil qilindi.

Tadqiqot ob'ekti "Jizzaxdonmahsulotlari" AJda tovar-moddiy zaxiralar va ular tarkibining oʻzgarishi tahlil qilinganda, korxonada tovar-moddiy zagʻiralarning hajmi 2020 yilga nisbatan 2024 yilda 113700 ming soʻm yoki 192 foizga oshgan. Zaxiralar tarkibida ishlab chiqarish zaxiralari salmoqli oʻrin egallaydi, mazkur xom-ashyo va materiallar qiymati 2024 yilda jami tovar-moddiy zaxiralarning 97,4 foizini tashkil qilgan.

“Jizzaxdonmahsulotlari” AJda tovar-moddiy zaxiralar va ular tarkibi o‘zgarishi, ming so‘mda[8]

Ko‘rsatkichlar	2020 yil 01.01.	2021 yil 01.01.	2022 yil 01.01.	2023 yil 01.01.	2024 yil 01.01.	2020 yilga nisbatan o‘zgarishi, foizda
Tovar-moddiy zaxiralar, jami	**123 472 799**	**85 125 505**	**189 717 526**	**184 256 630**	**237 173 241**	**192,0**
shu jumladan:						
Ishlab chiqarish zaxiralari	121 063 000	83 928 028	173 164 631	169 814 268	231 058 823	190,8
Tugallanmagan ishlab chiqarish	0	0	0	0	0	
Tayyor mahsulot	1 918 495	1 209 347	164 498 291	13 368 019	5 398 165	281,3
Tovarlar	491 304	15 130	54 604	1 074 343	716 253	145,7
Jami joriy aktivlar	**221 820 677**	**166 427 621**	**265 750 049**	**277 864 461**	**342 444 589**	**154,3**
Jami aktivlar	**273 104 483**	**229 760 080**	**323 804 201**	**327 200 195**	**388 171 719**	**142,1**

Shuningdek, TMZlarning jami aktivlardagi salmog‘i 2020 yilda 55,6 foizdan 2024 yilda 69,2 foizgacha ortgan va umumiy ko‘rsatkichda bu 124,4 foizni tashkil qiladi. O‘z navbatida TMZlarning hajmi joriy aktivlar tarkibida 2020 yilda 80,9 foizni tashkil etgan bo‘lsa, bu ko‘rsatkich 2024 yilga kelib 88,1 yoki farqi sifatida 108,9 ga teng bo‘lgan. Korxonada tayyor mahsulotlar va tovarlar hajmi ham o‘sish tendensiyasiga ega. Albatta bu yaxshi holat deb baholash mumkin, lekin masalani boshqa tomoni ularni saqlash bilan bog‘liq xarajatlarni ham bir vaqtning o‘zida o‘sib borishini anglatadi. Korxonada tugallanmagan ishlab chiqarish bo‘yicha so‘nggi besh yilda qoldiqqa ega bo‘lmagan. Umumiy xulosa qilish mumkinki, aksiyadorlik jamiyatida tovar-moddiy zaxiralarning ko‘payishi, korxonaning joriy likvidlik darajasini oshishining asosiy omillardan biri bo‘lib qoladi.

Tovar-moddiy zaxiralarni vertikal tahlili uning tarkibiy jihatlariga baho berishni o‘zida ifodalaydi. Bizning fikrimizcha tovar-moddiy zaxiralarni vertikal tahlil qilish ularning salmog‘i va o‘zgarishlari asosida korxonalarning moliyaviy holatiga baho berish imkoniyatini yaratadi. Shuningdek, mazkur tahlilda tovar-moddiy zaxiralar holatini bilish, anglash hamda to‘g‘ri nisbatlash mumkin bo‘ladi.

Tovar-moddiy zaxiralarni vertikal tahlilida ayrim tarkib qatorlar salmog‘ini balans jamiga nisbatan va ushbu tarkibning jamlangan qatoriga nisbatan ham hisob-kitoblar amalga oshiriladi. Bu esa, tovar-moddiy zaxiralarning tarkibiy o‘zgarishlarini baholashga, aktivlar tarkibida alohida tarkiblar salmog‘ining o‘zgarishini, likvidlik va to‘lovga qobillik ko‘rsatkichlari ta’sirini to‘g‘ri baholashga imkon beradi. Natijada, tovar-moddiy zahirlarning tarkibiy

[8] “Жиззахдонмаҳсулотлари” АЖ маълумотлари асосида муаллиф томонидан тузилган.

o‘zgarishlarini amalga oshirish orqali korxonalarning moliyaviy holatni yaxshilash bo‘yicha tegishli chora-tadbirlarni ishlab chiqishi mumkin bo‘ladi.

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HUDUDLARNING IJTIMOIY-IQTISODIY DAROMADLARINI OSHIRISH YO’LLARI

Annotatsiya*. Maqolada mamlakat ijtimoiy-iqtisodiy rivojlanishni ta’minlashda byudjet istiqbolining mohiyati, tarkibi, byudjet daromadlarining o‘ziga xos xususiyatlari, ularni tashkil etish holati, shuningdek, byudjet istiqboli va byudjet daromadlarini oshirish borasida taklif va tavsiyalar shakllantirilgan.*
Kalit so‘zlar*: byudjet istiqboli, byudjet daromadi, soliq, yuridik shaxs.*

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WAYS TO INCREASE THE SOCIAL ECONOMIC INCOME OF REGIONS

Annotation. *In the article, the essence of the budget prospect in ensuring the socio-economic development of the country, the composition, the specifics of budget revenues, the state of their organization, as well as proposals and recommendations on the prospects for the budget and increasing budget revenues are formulated.*
Keywords: *budget perspective, budget income, tax, legal entity.*

Kirish. Mamlakat istiqbolini belgilashda va yalpi ichki (milliy) mahsulotni taqsimlashning moliyaviy vositasi sifatida davlat byudjeti o‘ziga xos xususiyatlarga ham ega. Agar moliya yordamida taqsimlash qiymatning shakllari o‘zgargan sharoitda va ko‘plab oldi-sotdilar natijasida amalga oshirilsa, yalpi ichki (milliy) mahsulotning davlat byudjeti orqali taqsimlanishi ma’lum darajada, almashuvdan ajralgan holda sodir bo‘ladi. Qiymatning davlat byudjeti orqali harakatlanishi mod-diy mahsulotning harakatidan to‘liq uziladi va sof qiymat xarakterini kasb etadi. Faqat davlat byudjetidan tashqarida, byudjet resurslari sarflanayotganda taqsimlash va almashuv operatsiyalarining qayta qo‘shilib ketishi sodir bo‘ladi.

Moliya tizimining boshqa barcha bo‘linmalari va moliyaviy kategoriyalar (baho, ish haqi, kredit va boshqalar) bilan chambarchas bog‘liqligi ham davlat byudjetiga xos xususiyatdir.

Davlat byudjetining istiqbolini ochib berishda u orqali amalga oshiriladigan taqsimlash jarayonlarining mazmunini ko‘rib chiqish alohida ahamiyat kasb etadi.

Tahlil va natijalar

Yalpi ichki (milliy) mahsulotni davlat byudjeti orqali taqsimlash bir vaqtning o‘zida, o‘zaro bog‘langan va ma’lum darajada mustaqil bo‘lgan uch bosqichga egadir:

1) umumdavlat pul fondini shakllantirish (byudjet daromadlari);

2) hududiy va ma’lum maqsadlarga mo‘ljallangan ko‘p sonli byudjet fondlarini yaratish;

3) byudjet fondidan foydalanish (byudjet xarajatlari). Davlat byudjeti orqali yalpi ichki (milliy) mahsulotni taqsimlashning bu bosqichlari bir vaqtning o‘zida va uzluksiz sodir bo‘lsada, bu ularning nisbatan alohidaligini ham inkor etmaydi. Bu bosqichlarni bo‘lish va ularni alohida-alohida ko‘rib chiqish orqali byudjetli taqsimlashning xarakteri, shakli va metodlari to‘g‘risida osonroq va aniqroq tasavvur hosil qilish mumkin.

Birinchi bosqichda yuridik va jismoniy shaxslarga tegishli pul mablag‘larining bir qismi davlatning qo‘lida to‘planishi sodir bo‘ladi. Ana shu asosda mablag‘larni oluvchi - davlat bilan mablag‘larni to‘lovchilar o‘rtasida moliyaviy munosabatlar vujudga keladi. Bu munosabatlar, asosan, majburiylik (imperativlik) xarakteriga egadir. Bu bosqichdagi taqsimlash jarayonlarining xarakterli xususiyati shundaki, byudjetga tushuvchi mablag‘lar ajratib olingan bo‘lib, ular qat’iy chegaralanmagan. Ularning barchasi hozircha yagona maqsadga - umumdavlat ehtiyojlarini qondirishga yo‘naltirilgan. Davlat pul fondining alohidaligiga aniq maqsadlarga mo‘ljallangan fondlarni kristallizatsiya qilish boshlanganda barham beriladi.

Byudjet istiqbolini belgilashda ikki xil tushunchadan foydalaniladi:

byudjetga to‘lovlar (soliqlar, ajratmalar, bojlar va boshqalar);

davlat byudjetining daromadlari.

Bu tushunchalar bir xil ma’noni anglatadi. Chunki ularning ikkalasi ham davlat va mablag‘ to‘lovchilar o‘rtasida vujudga keladigan bir xildagi taqsimlash munosabatlarini ifoda etadi. Bu yerda faqat ma’no jihatidan emas, balki miqdoriy jihatdan ham bir xillikka erishilgan. Zero, ularning xar ikkalasi ham milliy daromadning yagona qismiga tegishlidir. Biroq bu tushunchalarning ikkiyoqlamalik xarakterga egaligini ham unutmaslik lozim.

Davlat byudjetiga to‘lovlar (soliqlar, ajratmalar, bojlar va boshqalar), eng avvalo, to‘lovchilarning xarajatlaridan iborat bo‘lib, ularning daromadlaridan chegirilsada, bir vaqtning o‘zida ular davlat byudjetida davlatning daromadlari sifatida gavdalanadi. Ana shundan taqsimlash munosabatlariga kirishgan ishtirokchilar (tomonlar) o‘rtasidagi manfaatlarda ba’zi bir farqli jihatlar vujudga keladi. Davlat byudjetning daromadlarini oshirishdan manfaatdor bo‘lsa, bu narsa u yoki bu darajada to‘lovchilarning (yuridik va jismoniy shaxslarning) manfaatdorligini (qiziquvchanligini) pasaytiradi.

Davlat byudjetining daromadlari o‘zining yaxlitligi (yagonaligi, birligi) bilan farqlanadi va ular yagona maqsadga - ijtimoiy ehtiyojlarni qondirishga xizmat qiladi. Undirish metodlari, to‘lovchilarning tarkibi, to‘lash muddatlari va hokazolarda katta farqlanishlar bo‘lishiga qaramasdan, ularning barchasi davlat pul fondini shakllantirish bo‘yicha davlat va to‘lovchilar o‘rtasida vujudga kelgan taqsimlash munosabatlarini tashuvchilar (ifodalovchilar)dir. Bu o‘z navbatida, mablag‘larni to‘lovchilar bilan davlat o‘rtasidagi munosabatlarning barchasi orasidan moliyaviy (byudjet) kategoriyaning bir ko‘rinishi sifatida alohida munosabatlarni ajratib olishga asos yaratib beradi. Agar moliya iqtisodiy kategoriya sifatida e’tirof etilgan bo‘lsa, byudjet bu kategoriyaning tarkibiy qismi ko‘rinishlaridan biridir. O‘z navbatida, byudjet uziga tegishli bo‘lgan (byudjetli) kategoriyalarni vujudga keltiradi.

Davlat byudjeti daromadlarini istiqbolini turli ko‘rinishlarini (qo‘shilgan qiymat solig‘i, aksizlar, daromad solig‘i va boshqalar) byudjet kategoriyalarining navbatdagi ko‘rinishlari sifatida talqin qilish uchun asoslar yetarli emas. Chunki mazmuniga ko‘ra iqtisodiy kategoriyalar obyektiv bo‘lib, ular iqtisodiy qonunlarning harakatini ifodalasa, ularning namoyon bo‘lish shakli esa, ma’lum darajada, subyektiv bo‘lishi mumkin. Shuning uchun ham istiqboli daromadlarning xar bir ko‘rinishiga tegishli bo‘lgan xususiyatlar obyektiv harakatdagi (amaldagi) iqtisodiy kategoriyaning - davlat byudjeti daromadlarining namoyon bo‘lish, ifodalanish shaklidir. Bu xulosaning to‘g‘riligini ko‘p yillik amaliyot ham tasdiqlaydi.

Byudjetga to‘lovlar ko‘rinishining o‘zgarishi, bir to‘lovning boshqa biri bilan almashtirilishi iqtisodiy kategoriya mazmunining emas, balki shakllarining evolyutsiyasidir. Biroq bundan moliyaviy va byudjet kategoriyalari kat’iyan obyektiv, ularning namoyon bo‘lish shakllari esa subyektivdir, degan xulosa chiqarmaslik kerak. Iqtisodiy qonunlarning harakati, iqtisodiyotning taraqqiyot darajasi, ishlab chiqarish munosabatlarining yetukligi va boshqa omillar, ma’lum darajada, davlat byudjeti daromadlarining shakllarini ham belgilab beradi. Bozor iqtisodiyoti (yoki unga o‘tish) sharoitida eng asosiy vazifa iqtisodiy taraqqiyotga erishish, uning samaradorligini ta’minlash, raqobatbardoshligiga erishish hisoblansa, bu vazifalarning bajarilishiga byudjetga to‘lovlarning shakllari ham o‘zining sezilarli hissasini qo‘shishi kerak. Ular byudjet daromadlarini miqdoriy jihatdan ta’minlabgina qolmasdan, balki ishlab chiqarish samaradorligini oshirish va moliyaviy resurslarning oqilona va maqsadli taqsimlanishini rag‘batlantirishi ham kerak. Shunday qilib, davlat tomonidan o‘rnatilgan tartib natijasida vujudga kelgan byudjetga to‘lovlarning turli shakllari davlatning qonunlarida, moliyaviy boshqaruv organlarining normativ hujjatlarida o‘z ifodasini topgan obyektiv omillarga ma’lum darajada bog‘liq bo‘ladi.

Hududiy va ma’lum maqsadlarga mo‘ljallangan ko‘p sonli fondlarning shakllanishi yuz beradi, ya’ni umumdavlat pul fondini bo‘lishning murakkab taqsimlanish jarayoni amalga oshiriladi. Tashqi tomondan u barcha ijtimoiy bo‘linmalardan ajralgan ichki byudjet jarayonidek ko‘rinadi. Haqikatda esa bu taqsimlash ijtimoiy munosabatlarning barcha sohalarini qamrab oladi. Bu bosqichda jamiyatdagi barcha subyektlarning manfaatlari o‘zaro to‘qnash keladi. Mamlakatdagi har bir ma’muriy-hududiy birlik o‘z byudjetiga ega bo‘lganligi uchun bu bosqichda ana shu byudjetlarning (ya’ni hududlarga, mo‘ljallangan fondlarning) umumiy hajmini to‘g‘ri aniqlash alohida ahamiyat kasb etadi. U yoki bu byudjetning xarajatlari joylarda olingan daromadlarning hajmi bilan mos kelmasligi oqibatida ularni qo‘shimcha mablag‘lar bilan ta’minlash zaruriyati vujudga keladi, barcha quyi byudjetlarni balanslashtirish zarurati paydo bo‘ladi. Shunday qilib, murakkab taqsimlash jarayoni sodir bo‘ladiki, unda mamlakat ma’muriy-hududiy bo‘linmalarining barchasi ishtirok etib, ularning ayrimlari o‘z mablag‘larini berishsa, boshqalari esa byudjet mexanizmi orqali bu mablag‘larni oladi.

Xulosa

Xududlararo byudjetli taqsimlash byudjetlarning yuqori va quyi bo‘g‘inlari o‘rtasidagi munosabatlardek ko‘rinadi. Chunki byudjetli tartibga solish yuqori byudjetlarning mablag‘lari hisobidan amalga oshiriladi. Biroq o‘z daromadlari hisobidan quyi bo‘g‘inlarning byudjet munosabatlarini tartibga soluvchi har bir byudjet bo‘linmasi amalda bu munosabatlarning tarkibiga yuqorida ko‘rsatilgan balanslashtirish sodir bo‘layotgan ko‘plab ma’muriy-xududiy birliklarni kiritadi. Ular esa, o‘z navbatida, byudjetli tartibga solishda xo‘jalik yurituvchi subyektlar va aholidan tushgan mablag‘larni sarflaydi. Demak, bu jarayonda ham turli subyektlar o‘rtasida murakkab va ko‘p tomonlama taqsimlash munosabatlari vujudga keladi.

Bir vaqtning o‘zida, byudjet va uning barcha bo‘linmalarida iqtisodiyot, ijtimoiy soha, ijtimoiy ta’minot, markazlashtirilgan investitsiyalar, hokimiyat va boshqaruv organlari, mudofaa va boshqalarning ehtiyojlarini qondirishga yo‘naltirilgan maqsadli fondlar shakllantiriladi. Bunda, albatta, iqtisodiyot tarmoklari, ijtimoiy sohaning bo‘linmalari va hokazolar o‘rtasida mablag‘larni qayta taqsimlash sodir bo‘ladi.

Byudjet fondlari hududlar va maqsadga mo‘ljallanganligi bo‘yicha xarajat qilinadi, ya’ni ko‘pchilik hollarda, bir mulkchilik shakli doirasida byudjet mablag‘larini qaytarilmaslik tarzida berish sodir bo‘ladi. Ularning haqiqatda sarflanishi esa byudjetli taqsimlash jarayonining oxirgi bosqichida byudjet mablag‘larini olganlar tomonidan amalga oshirilishi byudjet istiqbolini belgilab berishda muhim rol o‘ynaydi.

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BOSIMLI QUVURLARDAGI GIDRAVLIK ZARBALARGA QARSHI CHORALAR ISHLAB CHIQISH

Annotatsiya *Respublikamizda qishloq xo'jaligi sug'oriladigan yerlarning 60 foizidan ortig'i nasos qurilmalari va stansiyalari yordamida sug'oriladi, ular qishloq xo'jaligi uchun ajratilgan elektr-energiyaning 70 foizidan ortig'ini iste'mol qiladi. Ko'rinib turibdiki ularni ekspluatatsiya xarajatlari nihoyatda oshib ketmoqda. Shuning uchun nasos qurilmalari va stansiyalaridan oqilona va samarali foydalanishni tashkil etish, bunda zamonaviy mexanizm va usullarni qo'llash hozirgi kunning eng dolzarb masalalaridan bo'lib maqolada ushbu masalalarga tavsiyalar berilgan.*

Kalit so'zlar: *Nasos,bosim, quvur, gidravlik zarba, nasos qurilmasi, teskari klapan, dvigatel, qulfak.*

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DEVELOPMENT OF MEASURES AGAINST HYDRAULIC SHOCK IN PRESSURE PIPES

Abstract. *More than 60% of irrigated agricultural lands in our republic are irrigated using pumping devices and stations, which consume more than 70% of the electricity allocated for agricultural needs. It is clear that the costs of their operation are increasing dramatically. Therefore, the organization of rational and effective use of pumping devices and stations, the use of modern mechanisms and methods is one of the most pressing issues of our time. Recommendations on these issues are given in the article..*

Keywords: *Pump, pressure, pipe, hydraulic shock, pumping device, check valve, engine, lock.*

Nasos stansiyasi binosidan suv chiqarish inshootiga yoki suv olish joyiga suvni bosim bilan uzatuvchi inshootlar bosimli quvurlar deyiladi. Bosim quvurlari nasos stansiyalari va qurilmalarining asosiy inshootlaridan hisoblanadi. Bosimli quvurlar suv, neft va boshqa suyuqliklarni isrofsiz uzatishda asosiy funksiyani bajaradi. Shuning uchun bosim quvurlari uzatilayotgan suyuqliklarni tejovchi asosiy texnologiya hisoblanadi. Bosim quvurlari har xil armatura (qulfak, teskari klapan va boshqalar), ya'ni jihozlar bilan ta'minlanadi. Bu jihozlar normal ishlamasa, nasos stansiyalari va qurilmalarining me'yordagi ish rejimining o'zgarishiga olib keladi. Bosimli quvurni loyihalashda quyidagi talablar asosida bajariladi:

1. Zaruriy miqdordagi suv sarfini belgilangan miqdorda o'tkazish;
2. Qurilishida oz kapital mablag' sarflanishi, ekspluatatsiya xarajatlari kam va ishlatish qulay bo'lishi;
3. Ishonchliligi va uzoq muddat ishlashini ta'minlash.

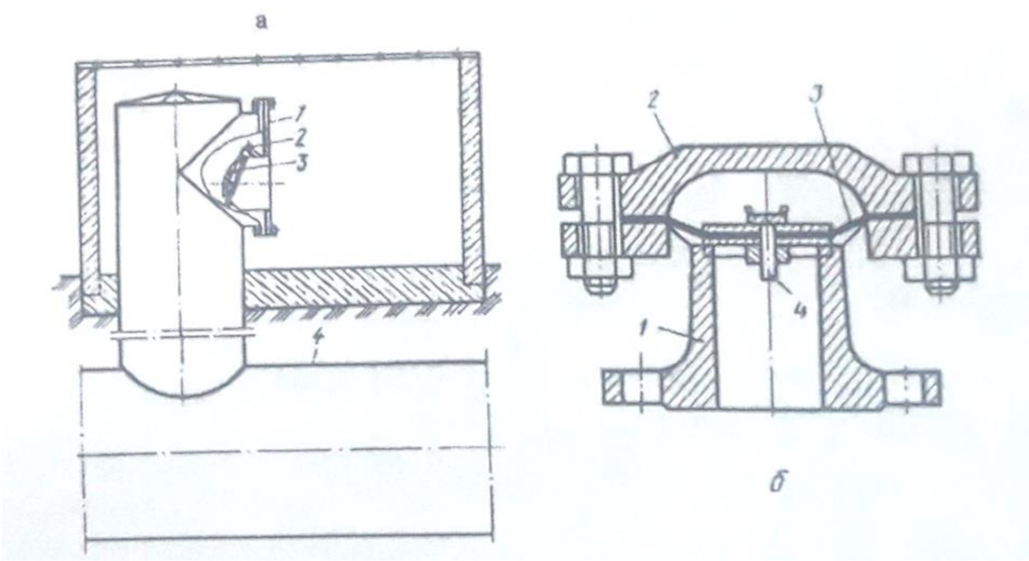
Bosimli quvurlarda gidravlik zarbalarning hosil bo'lish sabablarini ko'rib chiqamiz, nasos stansiyalaridan foydalanish jarayonida nasosni harakatga keltiradigan elektrodvigatelga to'satdan elektr ta'minotining uzilishi, nasos stansiyani ishga solish va to'xtatish davrlarida bosimli quvurlarda nobarqaror gidravlik jarayon ya'ni gidravlik zarba jarayoni yuzaga keladi. Bosimli quvurlarning materalini tanlashdagi hisobiy bosim ularda gidravlik zarb ta'sirida bosimning e'tiborga olib belgilanadi. Dvigatelni to'xtatish paytida nasosning aylanish chastotasi, suv uzatishi, bosimi pasayib boradi va biroz muddatdan so'ng oqimning teskari harakati vujudga keladi. Agar bosimli quvurga teskari qopqoq o'rnatilgan bo'lsa, uning tarelkasi berkilishi oqimni harakatining keskin to'xtashiga va quvurdagi bosimni ortib ketishiga sabab bo'ladi. Quvurdagi oqimning uzilishi ro'y beradigan hollarda bosimning ortishi yanada yuqori bo'ladi.

Gidravlik zarbga qarshi choralar: Gidravlik zarbga qarshi choralar 2 – xil yo'nalishda olib boriladi.

a) Suvning tezligini kamaytirishga asoslangan usullar;
b) Quvurdan suvni tashlashga asoslangan usullar.

Suvning tezligini kamaytirish uchun quyidagi usullardan foydalanadi:

1. Quvurdagi statik bosim 20 m gacha bo'lgan hollarda, oqimning uzulishi ehtimoli bor nuqtalarga havo kiritiladi (havo kiritish qopqog'i 1-rasmda keltirilgan)



1 -rasm. Havo kiritish qopqoqlari:

a-teskari qopqoqli; 1-gardish; 2-o’q; 3-tarelka; 4-bosimli quvur;

b-membranali; 1-qobiq; 2-qopqoq; 3-membrana; 4-drosel

2. Quvurning bosim ortadigan nuqtasi tepasiga ochiq suv – bosimli minora o’rnatib, bosim kuchi susaytiradi. Suv ustuni quvurdagi bosimga juda baland bo’lgani uchun bu usul kam qo’llaniladi;
3. Diamaetri 700 mm dan kichik quvurlarning bosim ortib ketadigan nuqtalariga 6 …. 10 m^3 hajmdagi 70 % qismi suv va 30% qismi havo bilan to’ldirilgan bosimli idish o’rnatilib, zarb kuchi kamaytiriladi;
4. Quvurga uning balandligi bo’yicha balandligi bo’yicha bo’laklarga bir nechta teskari qopqoqlar o’rnatilib, zarb kuchi kamaytiriladi. Bu holda quvurlar gidravlik qarshiliklar ancha ortishi va teskari qopqoqlarning kechikib berkitilish holatlarini etiborga olish zarur.

Quvurdan suv tashlab zarb kuchini kamaytirish uchun nasos agregatini yoki qulfakni aylanib o’tuvchi diametri (0,2 …. 0,35)*D ga teng tashlama o’tqazilib, unga teskari klapan o’rnatiladi. Agar nasos va dvigateli valining teskari aylanishi zavod ruxsat etadigan darajadan ortib ketmasa, suv nasos orqali tashlab yuborilishi mumkin.

Bulardan tashqari quvurga o’rnatiladigan boshqariladigan qulfak va teskari qopqoqlarning berkitilish vaqtini tanlab, zarb kuchini kamaytirish mumkin.

Bu vaqt quyidagi formula asosida aniqlanadi:

$$T_3 = \frac{l \cdot V}{\bar{g}(H_{max} - H_x)} \sqrt{\frac{H_{max}}{H_x - h_w}};$$

Bu yerda: H_{max} – quvurdagi maksimal hisobiy bosim; H_x – nasosning hisobiy bosimi; h_w – quvurdagi bosim isroflari yig’indisi.

Xulosa.

Bosimli quvurlar ekspluatatsiya jarayonida tabiiy (yomg'ir,quyosh va boshqalar) va sun'iy (noto'g'ri ekspluatatsiya) omillar ta'sirida mustahkamlik qobilyatini yo'qotadi hamda nasos hosil qilayotgan bosimga va quvurlar ulangan joylarda vujudga kelayotgan gidravlik zarbaga dosh bera olmay avariya holati yuz beradi. Bularning oldi olinishi uchun bosimli quvurlarning texnik holati doimiy nazorat ostida bo'lishi kerak.

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KATTAQUM–2 NASOS STANSIYASINI ISH FAOLIYATINI YAXSHILASH BO'YICHA CHORA-TADBIRLAR ISHLAB CHIQISH

Annotatsiya *Ushbu maqolada nasoslarning ish rejimi va energiya tejamkor texnalogiyalarni qo'llash orqali ishlash sharoitini yaxshilash hamda xalq xo'jaligida qishloq xo'jaligi mahsulotlarini yetishtirishda suvning ahamiyati va suv resurslari muammolarini yechishga qaratilgan tavsiyalar berilgan .*

Kalit so'zlar: *Nasos,bosim, quvur, gidravlik zarba, nasos qurilmasi, teskari klapan, dvigatel, qulfak.*

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DEVELOPMENT OF MEASURES TO IMPROVE THE OPERATION OF KATTAKUM–2 PUMPING STATION

Abstract. *This article provides recommendations aimed at improving the operating conditions of pumps and the use of energy-saving technologies, as well as the importance of water in the production of agricultural products in the national economy and solving water resource problems.*

Keywords: *Pump, pressure, pipe, hydraulic shock, pumping device, check valve, engine, lock.*

«Kattaqum-2» nasos stansiyasi 7000 ga qishloq xo'jaligi ekin maydonlariga Q = 7,0 m^3/s suv yetkazib beradigan, H=30 m balandlikka ko'tarib beradigan 6 dona nasos agregatidan iborat edi. Ushbu D5000-32 nasoslarni aylanishlar soni – n = 750 ayl/daq. ga, kuchlanishi – U = 6 kV va quvvati - N = 630 kVt bo'lgan elektrodvigatellar harakatga keltiradi.

Umumiy bosimli quvuri 2 donadan iborat bo'lib, uning diametri – D = 1400 mm. ni, uzunligi – L = 1 km. ni tashkil qiladi. Nasos stansiyasi bilan bosimli xovuz orasidagi masofa katta (L=1km) bo'lganligi sababli, 3 nasos agregatlarining individual bosim quvurlari umumiy bosim quvuriga birlashtirilgan.

Nasos stansiyasini tashqaridan elektroenergiya bilan ta'minlash, kuch- lanishi – U=35/6 kV bo'lgan «Kattaqum-2» podstansiyasiga o'rnatilgan 6300 kVt li transformatordan amalga oshiriladi.

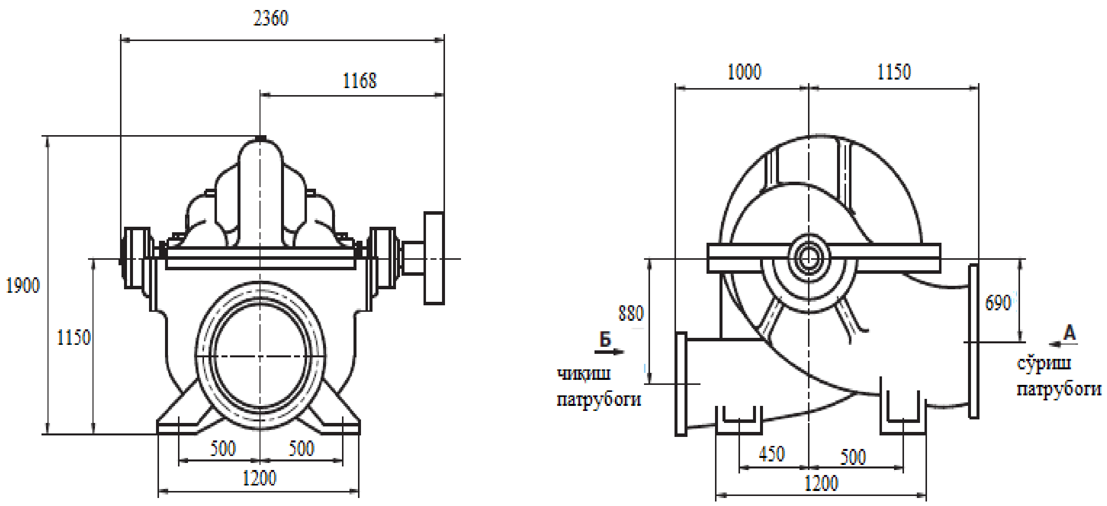
Hozirgi kunda nasos stansiyasi uzatadigan suv sarfi – Q = 1,0 m^3/s ga kamayib ketgan. Nasos stansiyasining barcha gidrotexnik, gidromexanik va elektr qismi, ayniqsa kabellari hamda yordamchi jihozlari, 33 yil mobaynida o'z resurslarini ishlatib, ham fizik ham ma'naviy eskirib bo'lgan.

«Kattaqum-2» nasos stansiyasiga birkitilgan 7000 ga qishloq xo'jaligi yerlarini kafolatli suv bilan ta'minlash uchun quyidagi ishlarni bajarish lozim:

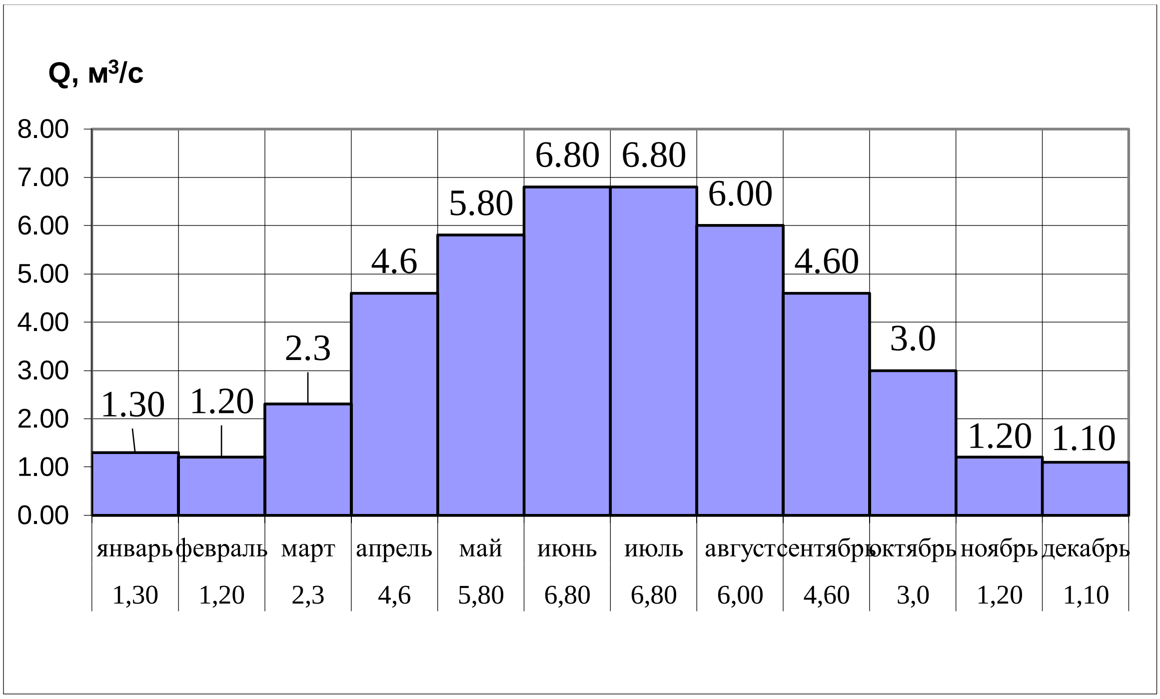
- suv uzatuvchi asosiy gidrokuch va elektr jihozlarini almashtirish;
- suv sarflari-Q=7,0 m^3/s va suv ko'tarish balandligi - H = 30 m bo'lgan 6 dona nasos agregatlari hamda ular uchun umumiy bo'lgan, diametri – D = 1400 mm va uzunligi–L =1 km bo'lgan 2 ta umumiy bosim quvurini o'rnatish.
- yordamchi jihozlarni almashtirish.

Ushbu loyihani bajarilishi ajratilgan 7000 ga yerlarni kafolatli suv bilan ta'minlashga asos bo'ladi.

Nasos stansiyasiga loyqalik miqdori 3 kg/m^3 bo'lgan suvlarni ko'tarishga mo'ljallangan «D» markali nasoslar o'rnatilgan. Nasoslarning ishchi qismlari abraziv yemirilishga uchrashi natijasida, nasoslarning suv sarfi kamayib ketishi hamda sug'oriladigan yerlarni suv bilan kafolatli ta'minlashni pasayishi kuzatiladi.



1-rasm.D5000-32 markali nasosning asosiy o'lchamlari.



2-rasm. Suv iste’moli sarflari grafigi

Oylar	1	2	3	4	5	6	7	8	9	10	11	12
Keltirilgan gidromodul, l/sek.ga	0,197	0,182	0,349	0,698	0,880	1,032	1,032	0,911	0,698	0,455	0,182	0,167
Har bir davrdagi iste’mol suv sarfi, m^3/s	0,51	0,51	0,6	1,18	1,54	1,85	1,85	1,85	1,51	1,13	1,03	0,75

1-jadval.Sug’orish davr (oy) lari bo’yicha suv iste’moli sarflari

Xulosa.

1. Hozirgi kunda nasos stansiyasining gidromexanik va energetik jihozlari hamda yordamchi jihozlari moddiy va ma’naviy yemirilgan.

2. Yemirilish natijasida nasos stansiyasi uzatadigan suv miqdori 14% ga kamayib ketgan.

3. Suv sarfining kamayishi, qishloq xo’jalik ekinlarinig suvga bo’lgan talabini to’liq qondira olmay qolishi natijadasida sug’oriladigan yerlarning qisqarishiga, hosildorlikni kamayishiga, ishsizlikni ko’payishiga va shu hududda istiqomat qiluvchi insonlarning hayot darajasini pasayishiga olib kelgan.

4. Hosildorlikni oshishi bilan bir qatorda, takroriy ekinlar ekilishi natijasida qishloq xo’jalik mahsulotlarining miqdori ham ko’payadi.

5. Nasos stansiyasining rekonstruksiya qilinishi natijasida, hosil-dorlikni oshishi va mahsulotlar miqdorining ko’payishi, fuqarolarni oziq-ovqat mahsulotlari bilan ta’minlanishini oshishiga, mahsulotlarni sotish hisobiga ularni boyishi,

soliqlarni o'z vaqtida to'lashalari natijasida, shu hududdagi ijtimoiy masalalar ijobiy hal qilinadi.

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Current problems of water intake from Amudarya without rest and measures to improve them BIO Web of Conferences 103, 00016

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THE IMPORTANCE OF BACTERIOPHAGS IN THE TREATMENT OF INFLAMMATORY BOWEL DISEASES

Abstract: *Today, inflammatory diseases, including pneumonia, pyelonephritis and other infections, are recognized as serious problems that threaten human health. Along with the widespread use of antibacterial drugs in the treatment of these diseases, the problem of antibacterial resistance is becoming increasingly acute. The resistance of bacteria to antibacterial drugs indicates that modern medicine needs to search for new treatment methods. Bacteriophages, that is, viruses that infect bacteria, hold great promise in this regard. They are distinguished by the fact that they provide the opportunity to target bacterial infections, help increase the effectiveness of antibiotics, and create the opportunity to find a solution to the problem of antibacterial resistance. This article provides detailed information.*

Keywords: *Inflammation, Bacteriophages, Infections, Bacteria, Viruses.*

Introduction

The role of bacteriophages in inflammatory diseases has gained significant importance in medicine in recent years. Bacteriophages, as viruses specific to bacteria, offer the opportunity to specifically destroy bacterial infections that play an important role in inflammatory processes. Inflammatory diseases, such as pneumonia, pyelonephritis and other bacterial infections, can often be treated with antibiotics, but the problem of antibiotic resistance is growing. Bacteriophages may offer a solution to this problem. The use of bacteriophages in inflammatory diseases has important advantages. They can specifically destroy specific bacteria, which is a great advantage for healthcare systems. Bacteriophage therapy can also be used in combination with antibiotics, which speeds up the inflammatory process and further improves the effectiveness of treatment. However, bacteriophages need to be prepared individually for each infection, which is time-consuming and resource-intensive.

The effectiveness of bacteriophages in inflammatory diseases has been confirmed by numerous studies. For example, several studies have shown that bacteriophages are effective not only against conventional bacteria, but also against antibiotic-resistant bacteria. Numerous clinical trials have been conducted in the treatment of bacteriophages, which further strengthen the importance of bacteriophages in inflammatory processes. Bacteriophage treatment strategies in inflammatory diseases include the use of bacteriophages prepared taking into account the specific characteristics of bacteria. For example, the selection of the appropriate bacteriophage for a specific bacterial infection, depending on the individual characteristics of patients, makes the treatment process more effective. Bacteriophages can also be used in combination with antibiotics, which helps to stop the growth of bacteria and reduce the inflammatory process. However, there are a number of problems with the use of bacteriophages in inflammatory diseases. Bacteriophages can be difficult to produce and store, and their safety and efficacy are also important issues. Thus, bacteriophages offer new opportunities in the treatment of inflammatory diseases, but more research and experimentation are needed before they can be put into clinical practice.

Bacteriophage-Based Treatment Strategies

Bacteriophage-based treatment strategies can be widely used with or without antibiotics. One of their main advantages is their ability to target infected bacteria. This approach, due to the specificity of bacteriophages, opens up new opportunities for healthcare systems to treat inflammatory diseases. Bacteriophages are also being considered as effective tools to address the problem of antibacterial resistance. In bacteriophage treatment strategies, it is important to first determine their effect on infected bacteria. Bacteriophages must be specifically designed for each type of bacteria, which means that the treatment process requires individual selection and preparation of bacteriophages. This process is often carried out in a laboratory setting and is tailored to the needs of individual patients.

One of the main bacteriophage treatment strategies is the use of bacteriophages to eliminate bacterial infections. For example, bacteriophages can be used to target bacteria in pneumonia, pyelonephritis, and other inflammatory diseases. Studies show that bacteriophages are more effective when used in combination with antibiotics, as bacteriophages reduce the side effects of antibiotic treatment and reduce the rate of bacterial infections. In addition, treatment strategies using bacteriophages should include innovative approaches to preventing and treating bacterial infections. For example, immunotherapeutic methods with bacteriophages aim to strengthen the patient's immune system and help it fight bacteria. Such strategies play an important role in improving the overall health of patients and reducing inflammatory processes. However, there are a number of challenges in developing bacteriophage treatment strategies. First, the process of producing bacteriophages can be complex and time-consuming. The need to develop specific bacteriophages for each type of bacteria requires efficient allocation of resources. Second, maintaining the biological activity and efficacy of bacteriophages also involves safety issues. Another important aspect is that during the treatment process with bacteriophages, it is necessary to take into account the individual characteristics of patients. The selection and use of bacteriophages should depend on the patient's health status, the specific characteristics of the infection, and other factors. Such an individual approach helps to increase the effectiveness of bacteriophages and improves the treatment process for patients.

Thus, bacteriophages are seen as an innovative and effective tool in the treatment of inflammatory diseases. Their targeted nature, as well as their use in combination with antibiotics, are creating new approaches to the treatment of bacterial infections in healthcare systems. The use of bacteriophages in clinical practice requires further study and research of their effects.

Challenges of Introducing Bacteriophages into Clinical Practice

The challenges of introducing bacteriophages into clinical practice are many. Bacteriophages are viruses that have the ability to specifically kill bacteria, but a number of problems need to be solved in the process of their application in clinical practice. These problems mainly include development, standardization, safety and efficacy assessment, as well as legal and ethical issues. First, bacteriophages must be prepared individually for each infection. This process can be very time-consuming and complex, since there are bacteriophages that attack different bacteria. The process of developing and preparing bacteriophages also requires conducting many experiments to identify and test them. Such an individual approach often limits the possibility of rapid and effective treatment for specific patients. Second, the problems associated with bacteriophages can be that some types of bacteria are difficult to infect. Some bacteria, such as those that form biofilms or have other defense mechanisms, can evade bacteriophage attack. In such cases, the effectiveness of bacteriophages decreases and their use becomes less effective. In addition, the problems of production and storage of bacteriophages are also of great importance. Mass production of bacteriophages and their storage conditions are important for maintaining their activity. Bacteriophages can be particularly sensitive to temperature and other environmental conditions, which creates difficulties during their storage. An important issue is also the assessment of the safety and effectiveness of bacteriophages. Like any new treatment, bacteriophages must undergo clinical trials. This process is necessary to ensure the health of patients and to identify possible side effects of bacteriophages. However, the limited information about bacteriophages and the difficulties in studying their long-term effects make their widespread use in clinical practice difficult. Legal and ethical issues also play an important role in the use of bacteriophages in clinical practice. Given the regulatory nature of bacteriophages in several countries, the process of obtaining approval for their clinical use can be complex. Bacteriophage research must adhere to high ethical standards, which creates additional challenges during research and clinical trials. The above issues are key issues that need to be considered when introducing bacteriophages into clinical practice. While their targeted nature and role in solving antibiotic resistance problems are of great importance in the healthcare sector, the need to address these issues must be taken into account. To further expand the possibilities of using bacteriophages in clinical practice, it is necessary to further deepen scientific research and simplify the process of their introduction into practice.

Bacteriophages in Inflammatory Diseases

Inflammatory diseases mainly involve inflammatory processes that occur in the body as a result of bacterial infections. Bacteriophages, as viruses that infect bacteria, play an important role in these processes. Their importance in inflammatory diseases has been confirmed by numerous scientific studies and clinical experiments. In this section, we will consider how bacteriophages are used in inflammatory diseases and their effectiveness.

Bacteriophages have many advantages in the treatment of inflammatory diseases, such as pneumonia, pyelonephritis, and other bacterial infections. They are able to specifically destroy bacteria, which creates additional opportunities for antibiotics in healthcare. Bacteriophages can activate the body's immune system by reducing inflammatory processes caused by bacterial attacks. Studies show that bacteriophages show faster and more effective results than antibacterial drugs in the fight against infections. One of the important aspects of the use of bacteriophages is their ability to combat antibacterial resistance. Although antibiotics have killed many bacteria, over time, these bacteria have developed resistance to antibiotics. Bacteriophages offer a solution to this problem. They can selectively kill bacteria and also effectively affect resistant bacteria. These properties make bacteriophages an interesting and promising tool for the treatment of inflammatory diseases. Strategies for treating inflammatory diseases with bacteriophages are being studied in clinical practice. For example, bacteriophage treatments can be used in combination with traditional antibiotics, which has a synergistic effect in eliminating infections. Some studies show that bacteriophage treatment can reduce the side effects that occur with antibiotic treatment. This, in turn, helps to improve the condition of patients and accelerate the healing process. A number of examples of the use of bacteriophages in clinical trials can be given. For example, the results of experiments conducted in Uzbekistan showed that bacteriophages are effective in acute pyelonephritis and other bacterial infections. When bacteriophages are used in inflammatory diseases, the condition of patients improves quickly and the symptoms of the infection quickly decrease. However, there are also difficulties associated with the use of bacteriophages in inflammatory diseases. Bacteriophages must be prepared individually for each infection, which is time-consuming and expensive. Also, some bacteria can be difficult to infect with bacteriophages. Problems in the production and storage of bacteriophages, as well as the assessment of their safety and efficacy, are also urgent issues. In general, bacteriophages open up new opportunities for the treatment of inflammatory diseases. Their targeted nature and role in solving the problem of antibacterial resistance are of great importance in public health. The possibilities of researching bacteriophages and their use in clinical practice should be further expanded.

Conclusion

Bacteriophages play an important role in the treatment of inflammatory diseases, and their importance has been increasing in recent years. This article reviews the potential of bacteriophages to target bacterial infections, their synergistic effect with antibiotics, and their use in clinical practice. Bacteriophages, in combination with or without antibiotics, offer an effective treatment strategy for inflammatory diseases, including pneumonia and pyelonephritis. Bacteriophages also show activity against antibiotic-resistant bacteria, which is of great importance in modern medicine.

The results of the article show that bacteriophages can be a very effective tool in the treatment of inflammatory diseases. However, there are a number of difficulties and problems in introducing them into clinical practice. For example, individual bacteriophages must be developed for each infection, which requires time and resources. Problems with the production and storage of bacteriophages are also urgent issues. At the same time, there are a number of difficulties in assessing their safety and efficacy.

In general, bacteriophages offer new and innovative methods for treating inflammatory diseases. Their potential and advantages are of great importance for healthcare systems. By continuing to study bacteriophages and introducing them into clinical practice, we can find solutions to the problems of antibacterial resistance and develop new approaches to treating inflammatory diseases.

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REGULAR METHODS FOR APPROXIMATE SOLUTIONS OF FIRST-TYPE INTEGRAL EQUATIONS

Annotation: *Integral equations are an important part of mathematical analysis and are widely used in various fields, including physics, economics, and other scientific disciplines. Integral equations are similar to differential equations, but their solutions are not directly determined. Instead, the solution depends on the integral of an unknown function. These equations are often used to model various physical processes such as heat conduction, electromagnetic waves, and acoustic phenomena.*

Key words: *Integral equations, Laplace Transform, Neumann Method, Numerical Methods, python, Simpson's Rule.*

Integral equations can be divided into two main types: **first-order** and **second-order** integral equations. First-order integral equations have relatively simple forms and can be solved using either analytical or numerical methods. In contrast, second-order integral equations are more complex and require more sophisticated techniques for solving. This article will focus on **first-order integral equations** and their solution methods, providing examples and detailed explanations.

Methods

First-order integral equations are generally expressed in the following form:

$$f(x) = \lambda \int_a^b K(x,t)g(t)dt + h(x)$$

Here:

- $f(x)$ and $h(x)$ are given functions,
- $K(x,t)$ is the kernel function,
- $g(t)$ is the unknown function,
- λ is a parameter.

Several methods can be used to solve first-order integral equations:

1. Laplace Transform

The Laplace transform is a powerful method for transforming integral equations into differential equations, which are often easier to solve. When the kernel function $K(x,t)$ is simple, the Laplace transform can be used to obtain an analytical solution.

2. Neumann Method

The Neumann method is based on iterating the solution of the integral equation. Each iteration improves upon the previous approximation, providing a more accurate solution. This method is particularly useful when the kernel function is complex or when an exact analytical solution is difficult to obtain.

3. Numerical Methods

When analytical methods are not feasible, numerical integration methods such as **Simpson's Rule** or the **Trapezoidal Rule** can be used to compute approximate solutions to integral equations. These methods provide an efficient way to solve integral equations when an exact solution is hard to derive.

Example and Solution in Python

Let's now consider a **first-order integral equation** and solve it using Python. The equation is given by:

$$f(x) = \int_0^x (x - t)e^{-t}dt + x$$

Here, e^{-t}— is the function $g(t)$, and $(x - t)$ is the kernel function. We need to compute $f(x)$.

To solve this equation numerically, we will use **Simpson's Rule**, which is a higher-accuracy numerical integration method.

```
python
import numpy as np
import scipy.integrate as integrate
import matplotlib.pyplot as plt
                              # Kernel function and g(t) function
def kernel(x, t):
   return x - t
def g(t):
   return np.exp(-t)
                                 # Define the integral function
def integral_function(x):
   result, _ = integrate.quad(lambda t: kernel(x, t) * g(t), 0, x)
   return result + x
                             # Generate values of f(x) for plotting
x_values = np.linspace(0.1, 10, 100)
f_values = [integral_function(x) for x in x_values]
                                          # Plot the results
plt.plot(x_values, f_values, label="f(x) = ∫(x - t)e^(-t) dt + x")
plt.xlabel("x")
plt.ylabel("f(x)")
plt.title("Solution of 1st Order Integral Equation")
plt.legend()
plt.grid(True)
plt.show()
```

Explanation and Results

The Python program computes the solution to the first-order integral equation and plots the results. **Simpson's Rule** is used to compute the integral numerically, and the **scipy.integrate.quad** function is employed to ensure high accuracy in the integral computation.

The plot displays how $f(x)$ varies with xxx, providing a visual representation of the solution to the integral equation. Numerical methods, such as the one used here, are particularly valuable when the kernel or $g(t)$ is complex and an exact analytical solution is difficult to obtain.

Conclusion

First-order integral equations can be solved using various mathematical methods, depending on the complexity of the equation. Analytical methods, such as Laplace transforms or the Neumann method, work well for simpler cases. However, for more complex equations, numerical methods, such as **Simpson's Rule** or the **Trapezoidal Rule**, provide accurate solutions. The Python program used here demonstrates how numerical methods can be applied to compute solutions efficiently. First-order integral equations are crucial in modeling physical processes, economic systems, and other applications, and numerical methods are essential when analytical solutions are not feasible.

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BRIDGING THEORY AND PRACTICE IN BUSINESS ENGLISH: A COMPARATIVE ANALYSIS OF FIVE RECENT STUDIES

Abstract :*This article examines five recent studies on Business English (BE) within the framework of English for Specific Purposes (ESP). By comparing their research aims, methodologies, and findings, the review highlights shared themes and unique approaches in advancing BE pedagogy. Key insights include the importance of learner-centered frameworks, the use of authentic materials and multimedia tools, and the integration of intercultural competence into ESP instruction. The article concludes with recommendations for synthesizing theoretical and practical strategies to address emerging challenges in BE education and equip learners for globalized professional environments.*

Keywords: *Business English, English for Specific Purposes, learner-centered frameworks, authentic materials, multimedia tools, intercultural competence, global professional skills.*

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BIZNES INGLIZ TILIDA KO'PRIK NAZARIYASI VA AMALIYOTI: SO'NGGI BESHTA TADQIQOTNING QIYOSIY TAHLILI

Annotatsiya:*Ushbu maqola maxsus maqsadlar uchun ingliz tili (ESP) doirasida biznes ingliz tiliga (BE) oid so‘nggi yillardagi beshta tadqiqotni tahlil qiladi. Tadqiqot maqsadlari, metodologiyalari va natijalarini taqqoslash orqali sharh BE pedagogikasini rivojlantirishdagi umumiy mavzular va o‘ziga xos yondashuvlarni ta’kidlaydi. Muhim xulosalar o‘quvchiga yo‘naltirilgan yondashuvlar, autentik materiallar va multimedia vositalaridan foydalanish, shuningdek, ESP ta’limiga madaniyatlararo kompetentsiyani integratsiyalash muhimligini o‘z ichiga oladi. Maqola BE ta’limida yuzaga kelayotgan muammolarni hal qilish va o‘quvchilarni globallashgan professional muhitga tayyorlash uchun nazariy va amaliy strategiyalarni birlashtirish bo‘yicha tavsiyalar bilan yakunlanadi.*

Kalit so‘zlar: *Biznes ingliz tili, maxsus maqsadlar uchun ingliz tili, o‘quvchiga yo‘naltirilgan yondashuv, autentik materiallar, multimedia vositalari, madaniyatlararo kompetentsiya, global professional ko‘nikmalar.*

Introduction

Business English (BE) and English for Specific Purposes (ESP) have emerged as essential fields of study in language education, particularly as globalization continues to shape professional landscapes. These disciplines aim to equip learners with the specialized linguistic, professional, and cultural competencies needed to thrive in increasingly interconnected markets. With English established as the lingua franca of international business, BE is not merely a language skill but a tool for career advancement and effective global communication.

This article examines five recent studies that explore innovative strategies for improving BE instruction within ESP frameworks. By comparing their research aims, methodologies, findings, and implications, this review uncovers shared themes and distinct approaches to advancing BE pedagogy. Through this comparative analysis, educators and researchers can better understand how to address contemporary challenges and enhance the effectiveness of BE instruction.

Research Aims and Objectives

The five studies analyzed in this review reflect diverse yet interconnected aims within the realm of BE and ESP instruction. Tursunova (2024) focuses on integrating linguistic and professional skills into ESP teaching, advocating for flexible, learner-centered frameworks that adapt to the evolving demands of the professional world. Shadmanbekova (2021) emphasizes the transformative role of BE in enhancing professional readiness, aiming to bridge the gap between theoretical instruction and practical application.

Embergenova (2024) narrows her focus to the role of authentic materials, such as newspapers and journals, in improving the vocabulary of students studying profession-oriented English. Her study aims to demonstrate how real-world materials can foster deeper linguistic engagement and practical application. Meanwhile, Kambarova (2024) investigates the potential of multimedia tools in developing communicative competence, arguing that digital technologies can simulate real-world business scenarios to create an engaging and contextually relevant learning environment.

Finally, Nizamova (2024) examines the challenges of translating cultural and geographical terms within ESP contexts. Her study highlights the intersection of linguistic precision and cultural awareness, aiming to equip learners with the skills needed to navigate complex cross-cultural communication. Collectively, these studies illustrate the multifaceted nature of BE and ESP instruction, addressing various dimensions of language learning, from vocabulary acquisition to intercultural competence.

Methodologies and Approaches

The methodologies employed in these studies reflect their diverse research objectives, blending theoretical exploration with practical application. Tursunova (2024) and Shadmanbekova (2021) adopt qualitative approaches, drawing on theoretical frameworks to explore the integration of professional skills into ESP curricula. Both studies emphasize the importance of curriculum adaptability and learner-centered design, highlighting the need for teaching strategies that respond to the specific needs of students in professional contexts.

In contrast, Embergenova (2024) and Kambarova (2024) employ hands-on approaches that prioritize the use of authentic materials and multimedia tools. Embergenova's study integrates profession-specific resources, such as industry publications, to enhance vocabulary acquisition and contextual understanding. Kambarova takes this further by incorporating interactive digital tools, including videos and simulations, to create immersive learning experiences. These practical methodologies demonstrate how innovative teaching strategies can bridge the gap between classroom instruction and real-world application.

Nizamova (2024) adopts a comparative analytical method to explore the complexities of translating cultural and geographical terms. By analyzing linguistic and cultural nuances, her study underscores the importance of contextual awareness in translation studies. This approach aligns with the broader objectives of BE and ESP, which prioritize the development of both linguistic precision and cultural competence.

Key Findings and Outcomes

The findings of these studies offer valuable insights into the teaching and learning of BE within ESP contexts. Tursunova (2024) highlights the critical need for adaptable teaching frameworks, arguing that flexible curricula are essential for addressing the dynamic demands of professional environments. She emphasizes the importance of integrating real-world applications into ESP instruction, such as internships, role-playing exercises, and case studies, to ensure that learners are prepared for the complexities of global business.

Shadmanbekova (2021) similarly underscores the transformative potential of BE instruction, noting its capacity to enhance students' professional readiness. However, her study also identifies challenges related to learner motivation and engagement, particularly in maintaining interest in specialized language training. To address these issues, she advocates for creative teaching strategies, such as gamified learning and personalized content, that align with students' interests and career goals.

Embergenova (2024) demonstrates that the use of authentic materials significantly improves vocabulary acquisition, enabling learners to develop practical language skills applicable to their professional contexts. However, her study also highlights practical challenges, such as the availability of relevant materials and the need for careful selection to ensure contextual appropriateness. Kambarova (2024) finds that multimedia tools enhance learners' communicative competence by providing immersive, real-world experiences. Her study emphasizes the potential of digital technologies to create engaging and interactive learning environments that reflect the realities of global business.

Nizamova (2024) sheds light on the challenges of translating cultural and geographical terms, emphasizing the importance of contextual awareness and linguistic precision. Her findings suggest that effective translation requires a nuanced understanding of both language and culture, particularly in professional and academic settings.

All five studies converge on the importance of contextualized, learner-centered instruction in ESP. They emphasize the need for innovative teaching strategies that address specific learner needs, such as the use of authentic materials, multimedia tools, and specialized curricula. Additionally, the studies highlight the growing demand for intercultural competence, adaptability, and critical thinking as essential skills for BE learners in globalized environments.

Discussion: Bridging Theory and Practice

Shared Themes

Despite their varied focuses, the studies converge on several key themes that underscore the importance of contextualized, learner-centered instruction in ESP. They collectively emphasize the need for innovative teaching strategies, such as the use of authentic materials, multimedia tools, and specialized curricula, to address specific learner needs. The studies also highlight the growing demand for intercultural competence, critical thinking, and adaptability as essential skills for BE learners navigating globalized professional environments.

Diverging Approaches

The studies also reveal notable differences in their approaches. Tursunova (2024) and Shadmanbekova (2021) take a theoretical stance, focusing on the integration of professional skills into ESP instruction, while Embergenova (2024) and Kambarova (2024) prioritize practical, material-based learning strategies. Nizamova's (2024) work stands apart by addressing translation challenges, providing insights into the intersection of language, culture, and context. These differences reflect the multifaceted nature of BE and ESP instruction, which requires a balance between theoretical exploration and practical application.

Conclusion

The reviewed studies collectively underscore the dynamic interplay between language instruction and professional skill development in ESP. By aligning teaching methodologies with real-world applications, they pave the way for learners to navigate complex global business environments. Future research should explore synergies between theoretical and practical approaches, leveraging technology and interdisciplinary insights to create scalable, flexible strategies for ESP instruction.

As globalization continues to shape professional landscapes, the role of BE in ESP remains crucial. By building on the strengths of these studies, educators can develop innovative, learner-centered methodologies that empower students to meet the evolving demands of international communication and collaboration.

Future research should explore ways to synthesize these diverse approaches, creating scalable and flexible strategies that address emerging challenges in ESP. Additionally, the role of technology in enhancing language learning, particularly through AI-driven tools and virtual simulations, holds significant potential for further innovation. As globalization continues to reshape professional landscapes, the role of BE in ESP remains vital, equipping learners with the linguistic, professional, and cultural competencies needed to succeed in an interconnected world.

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BANDLI SELDEREY AHAMIYATI VA YETISHTIRISH TEXNOLOGIYASI

Annotatsiya: Seldereyni asosiy yetishtiriladigan turlari, bargli selderey, bandli, va ildizmevali selderey haqida. Bandli seldereyning foydali jihatlari. Yetishtirish texnologiyasi va yetishtirishning oʻziga xos xususiyatlari.
Kalit soʻzlar: Seldereydoshlar oilasi, bandli selderey, foydali xususiyatlar, Mulchalash

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THE IMPORTANCE AND CULTIVATION TECHNOLOGY OF BUSY CELERY

Annotation: About the main cultivated types of celery, leaf celery, bunch celery, and root celery. Useful aspects of busy celery. Cultivation technology and specific characteristics of cultivation.
Keywords: Apiaceae family (Celery family), Stalk celery, Beneficial properties, Mulching

Bandli selderey (Apium graveolens var. dulce). Soyabonguldoshlar (Apeaceae) oilasiga mansub ikki yillik oʻsimlik.

Bandli selderey yovvoyi seldereyning (Apium graveolens) maxsus seleksiya qilingan navi hisoblanadi. Yovvoyi selderey asosan Yevropa va Oʻrta Yer dengizi boʻylarida keng tarqalgan boʻlib, tarixan bu oʻsimlik Hindiston, Eron va Misr kabi joylarda dastlab dorivor maqsadlarda ishlatilgan. Hozirgi kunda bandli selderey asosan Yevropa, Shimoliy Amerika va Osiyoda yetishtiriladi.

Bandli selderey oʻrtacha nam iqlimda yaxshi oʻsadi. U moʻtadil haroratga moyil boʻlib, ideal harorat oraligʻi **15-21°C** darajani tashkil etadi. Harorat bu chegaradan yuqori yoki past boʻlganida oʻsimliklar rivojlanishi sustlashadi.

Selderey uchun yaxshi drenaj qilingan, sernam va unumdor tuproq talab etiladi. Tuproqning pH darajasi **6-7** atrofida bo‘lishi kerak. Suvni saqlovchi tuproqlar seldereyning ildiz tizimini rivojlantirish uchun muhimdir.

Morfologik belgilari: Bandli seldereyning morfologiyasi uning ildiz tizimi, poyasi, barglari va gul-qo'rg'oshinlariga qarab ajralib turadi. Har bir morfologik qismning o‘simlik hayotida muhim vazifalari bor, ular suv va ozuqa moddalarini o‘zlashtirishdan tortib, hosil berishgacha bo‘lgan jarayonlarni ta'minlaydi. Quyida bandli seldereyning asosiy morfologik qismlari batafsil keltiriladi.

Bandli selderey kuchli ildiz tizimiga ega bo‘lib, tuproqning yuqori qatlamida kengayadi. Ildizlari unchalik chuqur rivojlanmaydi, ammo ularning keng tarqalishi orqali tuproqdagi suv va ozuqa moddalari yaxshi o‘zlashtiriladi. Ildiz tizimining yaxshi rivojlanishi tuproqning namligi va ozuqa moddalariga bog‘liq bo‘lib, ildizning asosiy vazifasi suv va minerallarni to‘plab, poya va barglarga yetkazishdir. Seldereyning ildiz tizimi ildizpoyadan chiqib, tuproqning yuqori qatlamlarida faol ozuqa moddalarini yutadi va ildizlar yaxshi shamollatilgan tuproqda yanada samarali rivojlanadi.

Bandli seldereyning asosiy va eng o‘ziga xos qismi uning poyasidir. Poya suvli, qalin va bo‘laklarga bo‘lingan bo‘lib, tarkibida ko‘p miqdorda suv va minerallar to‘plangan. Poyaning rangi yashil yoki biroz oqish tusda bo‘lib, o‘simlikning umumiy oziqaviy qiymatiga va lazzat xususiyatiga katta ta’sir ko‘rsatadi. Poya o‘simlikning suv saqlash xususiyatiga ega bo‘lib, bu uni namlik yetishmovchiligiga nisbatan chidamli qiladi. Poyalarning suvli bo‘lishi seldereyning oziqlanish sifatini oshiradi va uni boshqa sabzavotlardan farqlantiradi.

Seldereyning poyasi segmentlarga bo‘lingan bo‘lib, har bir segment o‘simlikning oziq moddalari transportida muhim ahamiyatga ega. Ushbu qalin, suvga boy poyalar selin, apiin va boshqa foydali moddalarni to‘plab, o‘simlikning lazzat va shifobaxsh xususiyatlarini oshiradi. Poyalarning zich va suvli bo‘lishi seldereyning oziqaviy qiymatini yanada oshiradi, bu esa ularni yangi iste’mol qilishga moslashtiradi.

Bandli seldereyning barglari kichik, uch-qirrali va ko‘pincha o‘tkir yoki to‘lqinli bo‘lib, barglarning rangi och yashil rangdan to‘q yashil ranggacha o‘zgaradi. Barglar o‘simlikning fotosintez jarayonida faol ishtirok etib, o‘simlikka energiya ta’minlaydi. Fotosintez jarayoni barglarning quyosh nurlarini yutish orqali o‘simlikka kerakli organik moddalar ishlab chiqarishiga yordam beradi.

Barglar ko‘pincha suv va ozuqa moddalarining yuqori qismini saqlaydi, ularning ichki hujayra qatlamlari orqali suv va oziqa moddalarining tarqalishi oson amalga oshadi. Bandli seldereyning barglarida ham shifobaxsh xususiyatlarga ega moddalar to‘plangan, shuning uchun ularni taomlarga qo‘shimcha lazzat va foyda berish uchun ishlatish mumkin. Barglarning tishsimon va to‘lqinli qirrasi seldereyning o‘ziga xos morfologik xususiyatlarini belgilaydi.

Kasalliklari

Septorioz - zamburug’ kasalligi selderey barglarida kichik sariq dog‘lar paydo bo‘lishiga olib keladi. Dog‘lar asta-sekin kengayib, o‘simlikning fotosintez jarayonini kamaytiradi.

Kurash usullari: Kasallangan barglarni olib tashlash va mis oksixlorid asosidagi fungitsidlardan foydalanish.

Bakterial kuyish kasalligi selderey poyalarida suvli, qora dog‘larning paydo bo‘lishiga sabab bo‘ladi va o‘simlikning rivojlanishini susaytiradi.

Ekishdan oldin urug‘larni dezinfeksiya qilish va zararlangan o‘simliklarni yo‘qotish.

Oq mog‘or - Ushbu kasallik selderey poyasida oq, ipak shakldagi mog‘or qoplamini hosil qiladi. Kasallik nam iqlim sharoitida tez tarqaladi.

O‘simliklar orasidagi masofani oshirish va tuproqni yaxshi shamollatish.

Xususiyatlari va qo‘llanilish sohasi: Bandli selderey oziq-ovqat, dorivor va kosmetik maqsadlarda keng qo‘llaniladi. Oziq-ovqat sanoatida u yangi salatlar, sho‘rvalar va sog‘lom ichimliklar tarkibiga qo‘shiladi. Selderey past kaloriyali bo‘lib, tola, vitamin va minerallar manbai hisoblanadi, shu sababli u parhez tutuvchilar va sportchilar orasida mashhur.

Dorivor maqsadlarda selderey yurak-qon tomir tizimini qo‘llab-quvvatlash, yallig‘lanishga qarshi kurashish va immunitetni mustahkamlash uchun ishlatiladi, chunki u antioksidantlar va fitokimyoviy moddalarga boy. Kosmetikada esa selderey ekstrakti terini namlantirish, yoshartirish va antioksidant ta’sirini kuchaytirish uchun qo‘llaniladi. Shu sababli, bandli selderey sog‘liqni saqlash va parhezga e'tibor qaratgan insonlar uchun muhim o‘simliklardan biridir.

Tuproq iqlim sharoitiga va ozuqa moddalarga bo‘lgan talabi: Selderey nam iqlim sharoitlarini yaxshi ko‘radi va mo‘tadil haroratda samarali o‘sadi. U yuqori harorat va quyosh nurlanishiga nisbatan sezgir, shuning uchun soyali sharoitlarda yaxshi rivojlanadi. Suv saqlash xususiyati yuqori bo‘lsa-da, doimiy sug‘orishni talab qiladi. Tuproqning unumdorligi va pH darajasi **6-7** atrofida bo‘lishi seldereyning optimal o‘sishini ta’minlaydi. O‘simlik quruq sharoitlarda va namlik yetishmovchiligida kam rivojlanadi, bu uning poyasi va barglariga salbiy ta’sir qiladi.

Bandli selderey to‘g‘ri o‘sishi uchun azot, fosfor va kaliy kabi asosiy ozuqa moddalarga talabchan. Azot seldereyning yashil massasi uchun, fosfor ildizlarning rivojlanishi uchun va kaliy esa o‘simlikning umumiy sog‘lomligi uchun muhim.

Azot seldereyning barglari va poyalari uchun zarur bo‘lgan asosiy modda bo‘lib, uni sug‘orish orqali doimiy yetkazib turish talab qilinadi.

Ildiz rivojlanishini rag‘batlantirish uchun har bir 3-4 haftada fosforli o‘g‘itlar bilan oziqlantiriladi.

Seldereyning o‘sish jarayonini boshqaradi va zararkunandalarga chidamliligini oshiradi.

1 ga ekin maydonida urug‘ hajmi va qiymati: Bandli seldereyni ekishda urug‘ sarfi o‘simlikning o‘sish sharoiti va ekish usuliga bog‘liq. Odatda, 1 ga maydonga urug‘ sarfi 3000-5000 gr atrofida bo‘ladi. Ekish uchun urug‘lar tuproq yuzasiga yaqin, taxminan 0,5 sm chuqurlikda sepiladi.

Ko‘chat yetishtirishda esa har bir ko‘chat uchun kamroq urug‘ ishlatiladi, chunki urug‘lar dastlab maxsus idishlarda yoki ko‘chat qutilarida o‘stiriladi, keyinchalik ochiq maydonga yoki issiqxonaga ko‘chiriladi. Shu tarzda urug‘ sarfi tejaladi va o‘simliklar rivojlanishi yaxshilanadi.

Parvarishlash. Bandli seldereyni yetishtirish uchun texnologik jarayonlar bir necha bosqichlarga bo‘linadi: urug‘ tayyorlash, ko‘chat yetishtirish, tuproq tayyorlash, ekish, sug‘orish, o‘g‘itlash va hosilni yig‘ish.

Urug‘ Tayyorlash va Ko‘chat Yetishtirish

Bandli selderey ko‘chat orqali yetishtiriladi, chunki urug‘dan to‘g‘ridan-to‘g‘ri ekish o‘sish davrini uzoqlashtiradi.

Urug‘lar ko‘chat qutilariga yoki maxsus idishlarga **0,5 sm** chuqurlikda ekiladi va tuproq namligi muntazam saqlanadi. Ekishdan keyin **20-25°C** darajada issiqlik ta’minlanadi.

Unib chiqish muddati: Urug‘lar taxminan **10-14 kun** ichida unib chiqadi. Ko‘chatlar **6-8 hafta** davomida parvarishlanadi, shu vaqt ichida ular **10-15 sm** balandlikka yetadi.

Tuproq Tayyorlash

Selderey unumdor, yaxshi drenajlangan va nam saqlovchi tuproqda yaxshi rivojlanadi.

Tuproqning pH darajasi 6-7 atrofida bo‘lishi kerak.

Tuproqni o‘g‘itlash uchun ekishdan oldin kompost yoki organik o‘g‘itlar qo‘shiladi. Bu ildiz tizimining rivojlanishini ta'minlaydi va o‘simlikka yetarli ozuqa moddalarini beradi.

Ekish va Ko‘chirish

Ko‘chatlar 15-20°C haroratda ochiq maydonga yoki issiqxonaga ko‘chiriladi.

Qator oralig‘i – 30-40 sm.

O‘simliklar oralig‘i – 20-25 sm. Bu masofa o‘simliklarning yaxshi o‘sishini ta'minlaydi.

Sug‘orish

Selderey doimiy namlik talab qiladi, lekin suvning turg‘un qolmasligiga e’tibor qaratish zarur.

Sug‘orish usuli: Tomchilatib sug‘orish eng maqsadga muvofiqdir, chunki u tuproq namligini barqaror ushlab turadi.

Yetishtirishning o‘ziga hosligi: Seldereyning poyasi yetilishiga 20-25 kun qolganda tuplarining ostki qismlari 10-15 sm balandlikda quyosh nuri tushmaydigan darajada mulchalanadi yoki ko‘miladi. Shunda poyasining 10 sm oralig‘i quyosh nuri tushmaganligi natijasida oqish tusga kiradi. Bu esa o‘z navbatida seldereyning tovarbopligi va narxini oshishiga olib keladi. Sababi shunday oqargan qismi qancha uzun va oqroq bo‘lsa o‘sha qismi o‘zgacha mazaga ega bo‘ladi.

Sug‘orish: Quruq sharoitlarda har kuni yoki har ikki kunda sug‘orish kerak.

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THE STUDY OF VERBS AND TENSES IN MODERN UZBEK LINGUISTICS

Abstract: *The article discusses the importance of the study of verbs and tenses in Uzbek linguistics, the scope of research in this field, and the problems and issues encountered. In particular, the views of linguists AG'.Gulomov, A.Hojiyev, Sh.Shukurov, M.Sodikova, who conducted extensive research on verbs in the second half of the 20th century, and their theories about verbs and tenses and published scientific works are covered. Also, in the years of independence, the scientific works of our linguists such as Sh.Rakhmatullayev and R.Rasulov on verbs, the issues analyzed in them, and a number of candidate dissertations are presented.*

Keywords: *tense, history of linguistics, vocabulary, verb, tense categories, verb categories, participle, morphology, auxiliary verb, proportion.*

Considering their position among word groups, verbs are of great importance in the field of morphology. Verbs are classified according to their feature of expressing the meaning of action. Among the grammatical categories of verbs, the category of tense is considered one of the sections that receive great attention in modern Uzbek linguistics. Despite extensive research, there are still many problems in the field that are waiting to be solved. Studying these problems consistently and solving them is one of the important goals of modern linguistics.

All scholars are unanimous in differentiating the tenses of verbs, dividing them into three tenses according to the expression of the action's relation to the moment of speech, i.e. the action before the moment of speech - the past tense, the time when the action coincides with the moment of speech - the present tense and to come later is the future tense. Differentiation of verb tenses in Uzbek is based on tense forms. The problem is that some tenses are so broad that they can represent more than one tense.

In Uzbek linguistics, many scientific works have been carried out on the verb word group. The fact that all grammatical categories and functional forms of verbs have been researched indicate that the verb word group is widely studied.

A number of accomplished Uzbek linguists, including AG'. Ghulomov, A. Hojiyev, Sh. Shukurov, M. Sodikova, Sh. Rahmatullayev, R. Rasulov, made a significant contribution to the study of the verb group. In particular, in modern Uzbek linguistics, AGulomov and A. Hojiyev are scholars who have paid serious attention to the study of the verb group and tense category.

The modern Uzbek language is characterized by a great richness in verb tense forms. Determining the commonalities of these forms and the specific characteristics of each is of great importance both theoretically and practically [1,128].

In modern Uzbek linguistics, AG'. G'ulomov was one of the first linguists to conduct research related to the word group of verbs and in his scientific manual "Verb" he touched upon all the properties of the verb, their meaning and grammatical features. The linguist defines verbs as a group of words expressing action and state and emphasizes the important role of verbs in morphology [2,3].

AG'. Gulomov divides the tenses in the Uzbek language into three main groups: past, present and future tenses, while paying attention to their internal divisions:

I. The past tense: 1) the definite past tense; 2) historical past tense; 3) past tense happened long before; 4) narrative past tense; 5) imperfect past tense verb.

II. Present tense: 1) present-future; 2) concrete present tense.

III. Future tense: 1) future continuous; 2) future tense.

When analyzing the works on the subject of the verb, A. Hajiyev's research is noteworthy. A. Hajiyev defines verbs as words that express the meaning of action [1,4]. In his monograph "Verb" the formation of verbs, their grammatical categories are highlighted, and attention is paid to revealing the nature of controversial issues regarding verbs in the Uzbek language, including the characteristic of showing tense forms in relation to the moment of speech. [2,131] He argues that group learning is correct and appropriate. A. Hajiyev divides the tense forms of verbs in the current Uzbek literary language into three main groups according to the characteristic of showing the relation of the action to the moment of speech: 1) past tense forms; 2) present tense forms; 3) present-future tense forms. Also, in 1966, the linguist's monograph entitled "Auxiliary Verbs in Uzbek" was published. This monograph is devoted to the study of auxiliary verbs in the Uzbek language, which includes the characteristics of various verb constructions, the meaning and essence of auxiliary verbs, their use, the meaning they represent. Issues such as the origin of nouns, their semantic classification, and their relation to the grammatical category are analysed. In A. Hojiyev's monograph "Imperfect Verb", imperfect verb forms and their meanings, which are one of the issues that receive little attention in Uzbek linguistics, are deeply studied. In this work, the characteristics of incomplete verbs are revealed with the help of valid facts.

In Uzbek linguistics, Sh.Shukurov also conducted scientific research on the word group of verbs, in particular, in his scientific work "From the History of Verbs", the meanings of mood and tense forms found in the language of ancient Turkish monuments and their use features of the application are disclosed. It also pays special attention to the phonetic representations of the affixes that form the mood and tense forms [3,3]. The linguist's work "Development of verb tenses in the Uzbek language" is aimed at studying the historical development of verb tenses in the Uzbek language. It discusses issues such as the emergence, development and stabilization of verb forms, as well as the activation or decline of these forms in the course of historical development [4]. Sh.Shukurov's research on the subject of verbs is also reflected in his work entitled "Development of verb tendencies in the Uzbek language". This work examines the development of verb moods and tenses in the

Uzbek language. Particular attention is paid to the imperative mood and conditional tendencies [5].

M. Sodikova conducted scientific research on verb stylistics[6,3]. In her scientific guide, the linguist stylistically analyzes verbs and verbs used in works of art. Linguistic materials that do not obey certain rules, contradict the rules, used improperly, or used deliberately to give stylistic color, to strive for originality, and similar language materials typical of the writer's writing technique are divided into two sections and analyzed scientifically and stylistically.

During the years of independence, linguists published a number of monographs, scientific manuals, scientific articles and candidate theses devoted to the verb-word group.

In the early years of independence, Sh.Rakhmatullayev conducted a research on the verb word group. In his scientific manual entitled "Connection of verb phrases in the Uzbek language", he emphasizes the possibilities of connecting verb phrases with other lexical units [7]. Phrases are divided into two groups, such as unlinked and linked, and linked phrases are also grouped as single, double, triple linked, and the possibilities of linking are described in detail.

R. Rasulov also conducted research on the study of the verb-word group during the period of independence. In particular, in his monograph "Meaning Structure of Verbs of the Uzbek Language" he deeply analyzes the meaning structure and meaning structure of Uzbek verbs. The meaning of state verbs in the Uzbek language is divided into components and divided into several lexical-semantic groups [8,7]. Grouping is based on common and unifying themes.

Also, a number of linguists supported candidacy and doctoral dissertations on verb word group. O'. Sharipova on the topic "Meaning valences of verbs in the Uzbek language" (1995), U. Feyda on the topic "The use of past tense verbs in the Uzbek and Uyghur languages in artistic speech" (1998) , Z.N.Hudaybergenova's "System of past tense forms of verbs in Uzbek and Turkish languages" (1999), B.M.Bahriddinova's "Verb system of lexical forms. Category category" (2002), G.A.Narimova's "Object argument of verbs in Uzbek language (2005), F.O. Jumayev's "Synonymous relationship of synthetic verb formations with analytical verb formations in Uzbek language" (2006), S.X.Muhamedova's on the topic "Semantic and valence features of action verbs in Uzbek" (2007), G.N.Isakova's " Lexical-semantic features of the verb “stay” in Uzbek language" (2008), Z.D.Mirzakarimova's "Semantics of verb-governing and auxiliary compounds" (2008), G'.Q. Mirsanov's "Verbs of action in English and Uzbek actional and aspectual features" (2009), F.G .Sharipov on the topic "Synthetic representation of the mode of action in verbs" (2009), D.G'aniyeva’s dissertations on the topic "Syncreticity and polyfunctionality in the functional forms of the verb in the Uzbek language" (2012) can be a clear proof of our opinion, but there are many problems waiting to be solved in the study of verbs and verb tenses. Research in this area will continue.

In conclusion, it should be said that although a lot of work has been done on the subject of verbs and tenses, there are inconsistencies in the division of verbs into tenses and issues that await their solution. The diversity and complexity of tense forms in the Uzbek language show that there is still a need to conduct a lot of research in the field.

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RUSSIAN PROVERBS AND SAYINGS: SPECIFICS OF THEIR TRANSLATION INTO THE KARAKALPAK LANGUAGE

Abstract: *This article discusses the comparative typology of paremia of the Russian and Karakalpak languages, and provides translation methods. The work can serve as additional material in the compilation of the dictionary of Russian and Karakalpak languages and in the work of teaching Russian and Karakalpak languages in native schools.*

Key words: *paremia, proverbs and sayings, aphorisms, concept, compensation, analogy, synonym, equivalent, descriptive, combined, tracing, axiology.*

The study of language from a linguoculturological perspective is both important and fascinating, as it considers language not only as a form of expressing national culture but also as a natural phenomenon. This approach highlights the connection between language and the history of a people, reflecting cultural features and traditions shaped by their way of life and passed down through generations. Linguistic and cultural aspects permeate all levels of language but are particularly evident in small linguistic units, such as paremias.

Paremias hold cultural significance in two main ways: they serve as integral symbols and reflect national cultural elements, enabling comparative analysis of various value-based concepts. As a distinct genre of oral folklore, paremias capture human relationships, societal and natural phenomena, and traditions. Broadly, paremias are understood as concise folk expressions—linguistic aphorisms rooted in folklore, featuring both literal and figurative meanings, a poetic structure, and grammatical completeness. In this context, paremias encompass proverbs and sayings, presenting insights into a people's worldview and acting as a specific type of maxim.

According to V. P. Zhukov, proverbs differ from sayings in that they possess both literal and figurative meanings (or only figurative ones), whereas sayings only convey literal meanings [V.P. Zhukov, 1968:11]. Despite their recognized cognitive value and extensive scholarly attention, there is still a lack of comprehensive research on thematic groups, particularly in the context of translation between Russian and Karakalpak. This underscores the relevance of the present study.

In addition to grammatical and structural distinctions, paremias exhibit lexical-semantic and thematic differences. For thematic and lexical-semantic classifications, we follow the framework established by V. P. Felitsina and Yu. E. Prokhorov, where paremias are categorized to reflect aspects of life and history, such as:

1. Activity and initiative: "Strike while the iron is hot."
2. Trouble and grief: "It is no use crying over spilt milk."

3. Poverty: "The shoemaker's son always goes barefoot."

4. Carelessness: "To go hunting - to feed dogs."

5. Thrift: "A penny saved is a penny gained."

6. Talkativeness and taciturnity: "A man's ruin lies in his tongue."

7. Pain and chagrin: "What the heart thinks the tongue speaks."

8. Mutual assistance: "A single thread from everyone and there's a shirt for the naked one."

9. Appearance vs. essence: "All that glitters is not gold."

10. Guilt and retribution: "Innocent until proven guilty."

11. Benefit: "It is not worth the effort."

12. Foolishness: "Fools are fools – they observe no rules."

In total, 84 topics are covered in the linguistic and cultural dictionary. Analysis of this material reveals various structural, lexical-semantic, and thematic groups of paremias. Therefore, this study focuses on translating paremias and their translatability. As Rosenthal D. E. and Telenkova M. A. define, translation involves "the transmission of the content of an oral or written text by means of another language" [Rosenthal D.E. and Telenkova M.A., 1972:250]. The translation of proverbs and sayings as expressive linguistic elements occupies a critical role in translation theory and practice, as well as in language teaching, cultural exchange, and the enrichment of linguistic expression in both languages under comparison

Through translation, uncovering the meanings of proverbs and sayings and identifying their analogues facilitates a deeper understanding of the moral and philosophical ideas about life and the worldview of two peoples. Considering this, our research focuses on the methods of translating Russian paremias into the Karakalpak language. The aim of the study is to identify approaches to conveying the meanings of paremias shaped by the Russian mentality in the Karakalpak language. The primary task is to achieve an accurate transfer of the meanings of Russian paremias into Karakalpak.

Translation of proverbs and sayings involves the interaction of two cultures, requiring the translator to possess knowledge of the history, traditions, culture, and living conditions of both peoples. Therefore, we base our work on widely accepted definitions of translation as a type of linguistic mediation that results in a text in the target language, communicatively equivalent to the original. This equivalence is evident in the functional, substantive, and structural relations between the translation and the original. Consequently, the communicative approach serves as the principal method, while comparative analysis of translations is the primary research technique.

Many scholars argue that literary works should be translated "literally," ensuring semantic accuracy and preserving the original's finest nuances. A communicative approach, however, emphasizes semantic, stylistic, and pragmatic adequacy. Comparing Russian and Karakalpak paremias reveals that some have thematic and lexical-semantic commonalities and are easily translatable, while others require explanation due to a lack of equivalence or literal correspondence.

For example:

As man sows, so shall he reap – не ексең соны орасаң
It is not worth a rush – бир пулға қымбат
To wash dirty linen in public – уйдиң сырын сыртқа шығарма
To be on top of the world – басы көкке жетиу
In the middle of nowhere – барса келмес
Strike while the iron is hot – темирди қызғанда соғыу / тандырды қызғанда жабыу
However, there are cases where equivalents do not exist, such as:
A disservice – (a helpful fool is more dangerous than an enemy)
Тақан шайысыӯ – (stop, end friendships)
Сиркеси суӯ котермеӯ – (dislike, be in a bad attitude)
From these examples, it becomes clear that some proverbs fully coincide, some partially, while others lack any correspondence. To address this, we utilize three translation types: full or partial semantic translation, and literal translation.
Examples of Translation Types:
1. Semantic Translation:
a) Complete:
They don't go to Tula with their samovar – Тоғайға шопшек алып бармайды
East or West, home is best – Қонақ жайда жақсы, ал ӯйде оннан жақсырақ
As man sows, so shall he reap – Не ексең соны орасан
b) Partial:
Every family has its black sheep – Бес бармақ бирдей емес
One foot in the grave – Бир аяғы гөрде, бир аяғы жерде
2. Literal Translation with Semantic Adaptation:
a) Grandmother said "more" in two (guessed) – Шенгел гүллегенде / Түйенің құйрығы жерге жеткенде
b) Far away (where the raven will not bring bones) – Барса келмес
c) The women shouted hooray and threw caps into the air – Топпысын аспанға атыӯ
Such examples demonstrate that achieving adequate translation often requires balancing semantic accuracy and cultural adaptation, ensuring the meaning resonates with the target audience while preserving the essence of the original.
They did not lead to execute, they led to utter a word – Бир қасық қанымнан кешиң.
The same Savka, on the same sled – Баяғы-баяғы бай хожаның таягы.
Literal translation of such proverbs fails to convey the original meaning.
Literal Translations:
Happiness takes no note of time – Бахытлы адамлар сагатқа қарамайды
Measure thrice, cut once – Жети өлшеп бир кес
Birds of a feather flock together – Балықшы балықшыны таныйды
Burned on milk, blows on water – Аузы куйген катыкты да уплеп ишеди
Haste makes waste – Асықсаң адамларға күлки боласаң
A fool you were born, you will die as one – Ақмақ болып туылсаң, ақмақ болып өлесең

In these cases, the proverbs align both structurally and literally.

Reverse Translation:

Reverse translation is employed to verify how well the translated paremias are assimilated. This method supports a communicative approach by ensuring equivalence and cultural relevance.

Conclusions:

In our research, we examined methods for translating Russian paremias into Karakalpak. The analysis revealed that paremias exhibit both universal and culturally specific characteristics. Translation approaches, including semantic, semantic-literal, and literal methods, were applied depending on the paremias' structural and cultural contexts.

This study could serve as a foundation for creating a Russian-Karakalpak dictionary of paremias, improving linguistic proficiency for learners, and fostering cultural exchange and mutual enrichment between the two peoples.

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PROGRESSIV VA PROPORSIONAL SOLIQQA TORTISH NAZARIYALARI VA MODELI

Аннотация: *Ushbu maqolada aholi daromadlarini optimal soliqqa tortish va soliq stavkalari ta`sirini baholash buyicha ezilgan.*
Калит сўзлар: *daromad, fiskal, progressiv daromad, modellashtirish, optimal*

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THEORY AND MODEL OF PROGRESSIVE AND PROPORTIONAL TAXATION

Аннотация: *This article discusses the optimal taxation of personal income and assessing the impact of tax rates.*
Key words: *income, fiscal, progressive income, modeling, optimal*

Progressiv va proporsional soliqqa tortish o`rtasidagi bahs va munozaralar hozirda dunyoning ko`plab mamlakatlarida iqtisodchi olimlar tomonidan faol muhokama qilinayotgan dolzarb masalalardan biriga aylangan. Jamiyatdagi daromadlar tengsizlik darajasini pasaytirish va adolatli mexanizmini yo`lga qo`yish bo‘yicha chora-tadbirlarning yetarli emasligi turli toifalar o`rtasidagi daromad farqini kamaytirish uchun samarali qayta taqsimlashni ta`minlash jismoniy shaxslarni soliqqa tortish tizimini takomillashtirish zaruriyatini keltirib chiqarmoqda.

Albatta, butun insoniyat taraqqiyoti davomida soliq tizimi sezilarli o`zgarishlarga duch keldi: natura ko`rinishidagi birinchi to`lovlar va zamonaviy soliqlar o`rtasida inson tafakkurining ming yillik taraqqiyot yo`li yotadi[9]. Ammo olimlar, iqtisodchilar va hukumat bu boradagi ko`plab muammoli masalalar bo‘yicha haligacha bir fikrda emaslar. Proporsional va progressiv soliqqa tortishni qo`llash bo‘yicha munozaralar XVIII asrdan boshlab va hozirgi kungacha qizg`in tortishuvlarga sabab bo`lmoqda. Masalan, A. Smit Proporsional soliqqa tortish tarafdori edi[10]. Ammo adolat tamoyilini tushunishning boshqa kontseptsiyalari ham mavjud[11]. Xususan, “vertikallik” bo‘yicha adolat soliq stavkasini yuqori daromadlarga oshirishni o‘z ichiga oladi[12]. Lekin nisbatan olganda, ayirboshlash nazariyasiga teskari bo`lib, ko`p miqdorda soliq to`laydigan boy aholi qatlamining jamiyatdagi faravonlikni taqsimotida ulushi yuqori bo`lishini anglatadi. Bu Jean-Jacques Rousseau, Jean Charles Léonard Simonde de Sismondi, Jean-Baptiste Saylar tomonidan inkor etilgan bo`lib, ularning ta`kidlashicha, jamiyatning yuqori qatlamlari vakillari o‘z mavqeini o‘z kapitalini himoya qiluvchi davlatga qarzdordir. Klassik maktab rivojlanishining yakuniy bosqichlarida marjinal hisob-kitoblardan foydalanish soliq to`lovchilarning turli toifalari uchun olingan teng daromad ulushlari har xil subyektiv qiymatga ega ekanligini aniqlashga imkon bergan. Rus olimi Kostyleva fikricha, soliq tizimi soliq yukini teng taqsimlashga asoslanishi kerak va uni tenglashtirish uchun soliqqa tortishning progressiv shkalasini joriy etish zarurligi John Stuart Mill tomonidan ko`rsatib o`tilgan[13].

Iqtisodchi olimlarning fikricha, aholi istemol talabi hajmining yetarli bo`lmagan (asosiy qism aholining pul daromadlari faqat birlamchi ehtiyojlarini qondirishi), yuqori darajadagi daromad tengsizligi sharoitida daromadga mutanosib stavkada soliq solinishi jamiyatda ijtimoiy tengsizlik va qarama-qarshiliklarning keskinlashuviga sabab bo`lishi mumkin. Darhaqiqat, o`n yildan ko`proq vaqt davomida Rossiya Federatsiyasi Davlat Dumasiga jismoniy shaxslarning daromad solig`i bo‘yicha progressiv shkalani joriy etishni nazarda tutuvchi qonun loyihalari kiritilib kelingan. Masalan, 2011 yilda yillik daromad miqdoriga muvofiq 10%,15%,25%,35% va 45% soliq tizimini joriy etishni nazarda tutuvchi loyiha ko`rib chiqilgan bo`lib, shubhasiz, mamlakat byudjet tizimi orqali yalpi ichki mahsulot qiymatining yanada adolatli qayta taqsimlanishi joriy etilganini ushbu qonun loyihasining afzalligi deb hisoblash mumkin. Shubhasiz, soliq solinmaydigan minimum daromad miqdorining belgilanishi aholi turmush darajasi

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[9]Kosov M. e., Bondarenko N. O. Teorii proportsionalnogo i progressivnogo nalogooblojeniya: praktika primeneniya. Mejdunarodniy buxgalterskiy uchet.–2018.–T.21,№11. 1268 s.

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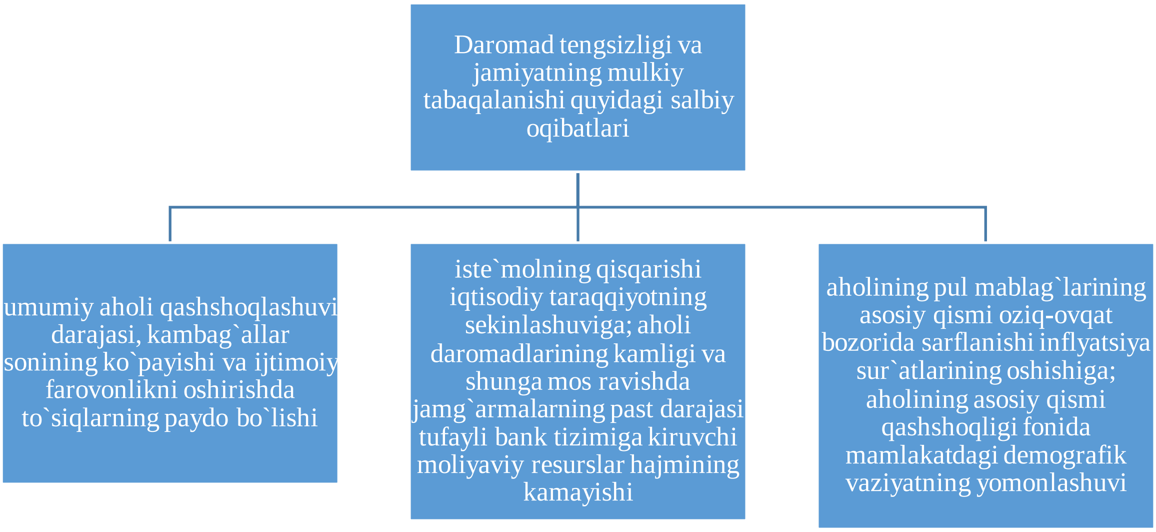
[13]Костылева Л.В. Налогообложение как механизм регулирования неравенства населения // Экономические и сотсиал`ные перемены: факты, тендентсии, прогноз. 2011. № 3. 66–77с.

yaxshilanishi va kam ta`minlangan aholi qatlami ixtiyoridagi daromadni ortishi o‘z navbatida  yalpi talabning o`sishiga ijobiy ta’sir ko`rsatadi[14].



1.6-rasm. Daromad tengsizligi va jamiyatning mulkiy tabaqalanishi quyidagi salbiy oqibatlar[15]

Xalqaro valyuta fondining (XVF) “Fiscal Monitor:Tackling Inequality” nomli ma`ruzasida progressiv soliqqa tortish byudjet resurslarini samarali qayta taqsimlashning asosiy tarkibiy qismi sifatida ko`rsatib o`tilgan[16]. Tadqiqot natijalarida soliq solish daromadlar tengsizligini kamaytirishi, biroq bu tendentsiya mamlakatlarda turlicha yuz beradi. Bunda, rivojlangan mamlakatlarda to`g`ridan to`g`ri soliqlar va transfertlar daromadlar tengsizligini o`rtacha uchdan bir qismga kamaytiradi.

Olib borilgan tadqiqotlar natijasida daromad tengsizligini tartibga solish instrumenti sifatida progressiv soliqqa tortish shkalalaridan foydalanishning samarali ekanligini ko`rsatgan. Shunday qilib, progressiv soliq shkalalaridan foydalanishning jahon mamlakatlaridagi tengsizlik darajasiga ijobiy ta’sirini aniq qayd etish mumkin. Biroq  mamlakatda shakllangan o`rta sinf mavjud bo`lmaganda progressiv soliqqa tortish samaradorligi minimallashtiriladi. Bundan kelib chiqib, rivojlangan mamlakatlarda, shuningdek, aholi turmush darajasi tegishli darajada bo`lgan rivojlanayotgan mamlakatlarda progressiv soliqqa tortishdan foydalanish tavsiya etiladi[17].

MDH iqtisodchilari Balatskiy va Ekimovalar tomonidan progressiv soliqqa tortish joriy etishning maqsadga muvofiqligini baholash uchun ikki parametrli modeldan foydalanilgan va bunday holda, ularning model sxemasida ikkita parametrni ijtimoiy (mablag`lar nisbati) va fiskal (soliq daromadlarining o`sishi)

[14]Косов М., Бондаренко Н. О. Теории пропортсионал`ного и прогрессивного налогообложения: практика применения. Международный бухгалтерский учет.–2018.–Т.21,№11..1270-1271с.
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[16]IMF Fiscal Monitor: Tackling Inequality / International Monetary Fund. – Washington, 2017. 10– 13p.
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hisobga olinishi nazarda tutilgan[18]. Progressiv soliqqa tortish joriy qilinishi mablag`lar nisbatini pasayishiga va soliq to`lovlarining oshishiga olib keladi. Ushbu sxemaning asosiy g`oyasi shundaki, hisob-kitoblarda progressiv daromad solig`i shkalasini joriy etishning ikkita natijasini bir vaqtning o`zida hisobga olish kerak. Progressiv daromad solig`i joriy etilishidan oldin, mablag`lar nisbatining boshlang`ich qiymati ahamiyatsiz tarzda hisoblanadi:

$$F_0 = \frac{D_{10}}{D_1} \qquad (1.9)$$

Bu yerda, D_1,, D_{10}, 1-chi va 10-chi detsil guruhlarini daromadi.

Soliq to`lovchilardan soliq tushumlarining boshlang`ich qiymati soddalashtirilgan formuladan foydalangan holda hisoblanishi mumkin:

$$T_0 = \alpha D - V \qquad (1.10)$$

Bu yerda, D, –aholining jami daromadlari; α – amaldagi soliq stavkasi; V – soliq chegirmalari.

Progressiv daromad solig`i joriy etilishidan keyin mablag`lar nisbati quyidagicha hisoblanadi:

$$F_1 = D_{10}^*/D_1^* \qquad (1.10)$$

Bu yerda, D_1^*, D_{10}^* – daromad solig`ining progressiv shkalasi joriy qilingannan keyingi 1-chi va 10-chi detsil guruhlarini daromadi.

Eng oddiy holatda, soliq imtiyozlarini e`tiborsiz qoldirish mumkin (V = 0). Bunday holatda soliq islohotining butun samarasi (progressiv daromad solig`i joriy etilishidan keyin) 10-chi detsil guruhi daromadi D_{10}^* ning yangi qiymati quyidagicha aniqlanadi:

$$D_{10}^* = (1-\alpha)W_{max}L_{10} + \Sigma_{i=2}^{n} L_{10.i}\Sigma_{j=1}^{i-1}(1-\beta_j)\left(W_{10.j,max} - W_{10.j,min}\right) + \Sigma_{i=1}^{n}(1-\beta_i)\left(\overleftarrow{W}_{10.i} - W_{10.i,min}\right)L_{10.i} \qquad (1.11)$$

Bu yerda, W_{max} – bazaviy soliq stavkasi (α) bo‘yicha maksimal daromad; L_{10} – 10-chi detsil guruhdagilar soni; $L_{10.i}$ – 10-chi detsil guruhdagi i– kichik guruhdagilar soni; β_iва β_j – 10-chi detsil guruhdagi i va j- kichik guruhdagilarga mos ravishdagi soliq stavkasi; $W_{10.j,max}$ –10-chi detsil guruhdagi j- kichik guruhdagilar daromadini yuqori chegarasi; $W_{10.i,min}$ва $W_{10.j,min}$ – mos ravishda 10-chi detsil guruhdagi i va j- kichik guruhdagilar daromadini quyi chegarasi; $\overleftarrow{W}_{10.i}$ –10-chi detsil guruhdagi i– kichik guruhdagilarni o`rtacha daromadi; $i = 1,n; j = 1,n; n = 5$.

Progressiv shkala kiritilgandan keyin daromad soliq tushumlari miqdori quyidagi formula bo‘yicha hisoblanadi:

$$T_1 = \alpha[(D - D_{10}) + W_{max}L_{10}] + \Sigma_{i=2}^{n} L_{10.i}\Sigma_{j=1}^{i-1}\beta_j\left(W_{10.j,max} - W_{10.j,min}\right) + \Sigma_{i=1}^{n}\left(\overleftarrow{W}_{10.i} - W_{10.i,min}\right)\beta_i L_{10.i} \qquad (1.12)$$

V= 0 da bo`lgan holatdagi formulani hisobga olgan holda (1.12) tenglamani quyidagicha qayta yozish mumkin:

[18]Балатский В., Екимова Н.А. Сравнител`ные характеристики прогрессивной и плоской шкалы подоходного налога. JOURNAL OF INSTITUTIONAL STUDIES Vol. 10, no. 3. 2018. S.110.

$$T_1 = T_0 + \alpha[W_{max}L_{10} - D_{10}] + \Sigma_{i=2}^{n} L_{10.i}\Sigma_{j=1}^{i-1}\beta_j\left(W_{10.j,max} - W_{10.j,min}\right) + \Sigma_{i=1}^{n}\left(\overleftarrow{W}_{10.i} - W_{10.i,min}\right)\beta_i L_{10.i} \qquad (1.13)$$

Tahlilni keyingi bosqichida mazkur ikki parametrni - progressiv shkala amalga kiritilgandan keyingi mablag`lar nisbati o`zgarishini baholash lozim:

$$\Delta F = F_1 - F_0 \qquad (1.14)$$

Shu bilan birga, soliq yig`imlarining mutlaq va nisbiy o`zgarishini baholash talab qilinadi:

$$\Delta T = T_1 - T_0 \qquad (1.15)$$

$$\lambda = \left(\frac{\Delta T}{T_0} - 1\right) * 100 \qquad (1.16)$$

Kiritilgan joriy belgilangan daromad solig`i joriy etish natijalarini baholash uchun kerakli modelni yozishga imkon beradi.

$$\lambda = (\ \beta_1 \dots \dots \beta_n) \rightarrow max \qquad (1.17)$$

$$\lambda = (\ \beta_1 \dots \dots \beta_n) \rightarrow min \qquad (1.18)$$

$$\beta_1 \leq \beta_1^*, i = 1, \dots . . n \qquad (1.19)$$

Bu yerda, β_1^* – model cheklovlari sifatida hisobga olinadigan daromad solig`i progressiv shkalaning maksimal ruxsat etilgan stavkalari. Qoida tariqasida bu stavkalar bo‘yicha rasmiy cheklovlar yo`q, ammo ularning oqilona qiymatlari haqida empirik dalillar mavjud. Mezon (1.17) ni ekvivalent bilan almashtirish mumkin[19]:

$$\Delta F(\ \beta_1 \dots \dots \beta_n) \rightarrow max \qquad (1.20)$$

Ushbu shakldа modelning ikkala mezonlari bir tomonlama bo‘lib chiqadi, ya’ni maksimallashgan. Turli stsenariylarni solishtirish uchun (1.17) va (1.20) mezonlarni ζ i 1–ζ.vazn koeffitsientlarini kiritish orqali bittasiga jamlash mumkin:

$$\zeta F\lambda + (1 - \zeta) \mid \Delta F \mid \rightarrow max \qquad (1.21)$$

$$\beta_1 \leq \beta_1^*, i = 1, \dots . . n \qquad (1.22)$$

Qurilgan model o‘z shakli bo‘yicha optimallashtirilgan hisoblanadi, ammo, progressiv soliq stavkasi stavkalarida aniq cheklovlar yo`qligi sababli, u soliq islohotining turli variantlarini baholash imkonini beruvchi simulyatsiya modeliga aylantiriladi. Progressiv shkalani joriy qilish ssenariylarini proporsional shkalani o`zgartirish ssenariysi bilan solishtirish uchun formuladan foydalangan holda ikkinchi holat uchun soliq yig`imlarini hisoblash kifoya hisoblanadi:

$$T_1 = \alpha^* D - V^* \qquad (1.23)$$

Bu yerda, α^* – daromad solig`ining o`zgartiligan proporsional stavkasi.

Yuqoridagi formulalar turli progressiv soliqqa tortish shkalalari va proporsional shkalaning oddiy o`zgarishi ssenariylari bilan ijtimoiy va fiskal natijalarini iloji boricha aniqroq baholash imkonini beradi. Soliq ta`sirining barcha makroiqtisodiy baholari, qoida tariqasida, juda shartli va yuqori aniqlikka da`vo qilmaydi. Biroq olib borilgan hisob – kitoblarni turli masshtablar-proporsional va progressiv soliqqa tortishning solishtirma ta`sirlarini aniqlashtirish uchun iloji boricha aniqroq amalga oshirishdir. Umuman olganda olib borilgan nazariy va

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empirik tahlil natijalariga ko`ra aholi daromadlarini proporsional stavkada soliqqa tortish davlat byudjetini to`ldirish va daromadlar tengsizligi bilan bog`liq muammolarini hal qilmaydi.

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A COMPARATIVE ANALYSIS OF PROVERBS WITH THE LEXEME "RIVER" IN ENGLISH AND UZBEK LANGUAGES

Abstract *This study examines proverbs containing the lexeme "river" in English and Uzbek languages to explore their linguistic and cultural significance. By comparing the structure, meaning, and usage of such proverbs, the research aims to identify similarities and differences that reflect cultural values and worldviews. The analysis employs a qualitative methodology, drawing from linguistic corpora and ethno linguistic sources. The findings indicate that while both languages use "river" as a metaphor for life, continuity, and change, the specific connotations and cultural underpinnings vary significantly.*

Key words: *comparative analysis, proverbs, lexeme "river", english language, linguistic features, cultural significance, metaphorical meanings, universal themes, culture-specific nuances, life and continuity, individualism*

Introduction Proverbs are an integral part of linguistic heritage, encapsulating the wisdom, traditions, and cultural values of a society. Among the myriad of natural elements featured in proverbs, "river" holds a special place due to its universal significance in human life. Rivers are often associated with continuity, fertility, and the passage of time. This study aims to compare proverbs containing the lexeme "river" in English and Uzbek, focusing on their metaphorical meanings and cultural contexts.

The primary objectives of this study are:

1. To analyze the linguistic features of proverbs with "river" in English and Uzbek.
2. To identify cultural and metaphorical nuances associated with "river" in both languages.
3. To draw insights into how these proverbs reflect societal values and worldviews.

Methodology This research adopts a qualitative comparative approach, relying on textual analysis of proverbs collected from English and Uzbek proverb dictionaries, linguistic corpora, and cultural literature. The selection criteria for proverbs included the explicit mention of the lexeme "river" and their metaphorical or idiomatic usage. Data were categorized based on thematic elements, such as life, time, and morality. Comparative analysis techniques were applied to identify patterns of similarity and divergence.

Results The analysis revealed both universal and culture-specific characteristics of proverbs with the lexeme "river."

1. **Universal Themes:**

In both English and Uzbek, rivers symbolize life and its continuity. For example, the English proverb "You can't step into the same river twice" parallels the Uzbek saying “Daryo bir joydan ikki marta oqmaydi”, both reflecting the transient nature of life.

Rivers as symbols of boundaries and obstacles are another shared theme. The English expression "Don't cross the river until you come to it" mirrors the Uzbek proverb “Daryoni kechib oʻtmasdan oʻtgan deb boʻlmaydi”.

2. **Culture-Specific Nuances:**

English proverbs often emphasize individualism and pragmatic problem-solving, as seen in "Don't throw away the oars when the river is calm."

Uzbek proverbs reflect communal values and a strong connection to agrarian lifestyles. For instance, “Daryoni suvi boʻlsa, hosil yaxshi boʻladi” highlights the importance of rivers for agricultural prosperity.

Discussion The findings indicate that while "river" serves as a universal metaphor, the cultural contexts significantly influence its specific connotations. The emphasis on individuality in English proverbs contrasts with the communal and agrarian focus in Uzbek sayings. These differences underscore the role of proverbs as cultural artifacts, shaped by historical, geographical, and social factors.

Conclusion This comparative analysis highlights the rich metaphorical and cultural dimensions of proverbs containing the lexeme "river" in English and Uzbek languages. While sharing universal themes, the proverbs reflect distinct cultural values and worldviews. Understanding these nuances contributes to cross-cultural communication and the appreciation of linguistic diversity. Future research could expand the scope to include other natural elements and their representations in different languages.

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CAUSES, SYMPTOMS, TREATMENT AND COMPLICATIONS OF PNEUMONIA

Abstract: *Pneumonia is a serious global health problem characterized by inflammation of the lung tissue in the human body. The main causes of this can be bacterial, viral or fungal infections. Modern treatment methods include new approaches to overcome this disease and include important medical and technological developments aimed at improving the health of patients, as well as reducing mortality. Modern treatment methods include complex and multifaceted approaches to eliminate pneumonia. They aim to improve the quality of life of patients by combining antibiotics, vaccination, supportive care and innovative technologies. However, there are many challenges and difficulties to overcome the problems of antimicrobial resistance and access. Therefore, collaboration between research and health professionals is essential for further progress in the fields of pneumonia treatment and prevention.*

Keywords: *Modern treatments for pneumonia, Pneumonia, Bacterial infections, Telemedicine, Streptococcus pneumoniae, Vaccines.*

Introduction

The history and main causes of pneumonia are largely related to important research in the field of medicine and health. Pneumonia is mainly characterized by inflammation of the lung tissue, and this inflammation is often caused by bacteria, viruses or fungi. Historically, this disease is one of the oldest diseases of mankind, which has been a cause of mass death for a very long time. However, with the development of modern medicine, extensive information has been accumulated about the causes, treatment methods and preventive measures of pneumonia.

Among the main causes of pneumonia, bacterial infections are most common. For example, Streptococcus pneumoniae is the most common bacterial cause of pneumonia. This bacterium can cause inflammation in the lungs and lead to severe breathing problems. Viruses, in particular influenza viruses, can also cause the development of pneumonia, especially when secondary bacterial infections occur after them. Fungi, such as Candida and Aspergillus, can also cause lung infections, but these cases are relatively rare. Historically, pneumonia has been a constant threat to humanity. The invention of antibiotics in the mid-20th century revolutionized the treatment of this disease, dramatically reducing the number of deaths from bacterial pneumonia. Antibiotics, such as penicillin, have played a major role in eliminating bacteria. However, problems with antibiotics in modern medicine, in particular antimicrobial resistance, pose new challenges to the treatment of pneumonia. Today, the methods used to treat the disease, as well as diagnostic and preventive measures, are changing. To gain a deeper understanding of the causes and history of pneumonia, it is necessary to study the evolution of the disease and how modern treatments have developed. With the growth of medical research and clinical experience, new knowledge has emerged about the various causes of pneumonia and their treatments. Today, immunization, preventive measures, and the use of modern diagnostic methods are essential in reducing and treating pneumonia.

Modern Treatment Methods and Their Effects

Modern treatment methods are essential for the effective management and treatment of pneumonia. Pneumonia is an inflammatory condition of the lungs caused mainly by bacteria, viruses or fungi, and the treatment of this disease involves the achievements of modern medicine and innovative technologies. This section provides detailed information about the main aspects of modern treatment methods and their effects. Modern treatment methods are carried out primarily through antibiotics, antiviral and antifungal drugs, as well as additional supportive treatments. Antibiotics are the mainstay of treatment for bacterial pneumonia. Their effectiveness is usually higher when used in the early stages of the disease. For example, according to a 2019 study, patients who received antibacterial drugs within 24 hours recovered much faster than those who delayed them. In addition, innovative technologies used in modern treatment approaches also play an important role. For example, the possibilities of rapid diagnosis using biomarkers are increasing. Biomarkers can help track the progression of the disease and determine a treatment plan. All this provides an individual approach for patients. In addition, there is the possibility of remote monitoring of patients using telemedicine. This method is especially important for patients living in rural areas, as their access to qualified medical care may be limited. With the help of telemedicine, patients can monitor their condition and, if necessary, contact a doctor. Vaccination is also of great importance in the prevention of pneumonia. Pneumococcal and influenza vaccines are recognized as important tools in the prevention of diseases. Vaccination can protect against pneumonia and its complications, which reduces the burden on the health system and generally improves the quality of life among patients. The effect of modern treatment methods is seen not only in eliminating the disease, but also in improving the overall health of patients. Effective treatment reduces the length of stay of patients in the hospital, which reduces healthcare costs and improves the quality of life of patients. It is important to note that modern treatment methods also face various challenges. Antimicrobial resistance, for example, remains a serious problem in the fight against antibiotics. In this situation, it is necessary to solve the problems by developing new drugs and using them effectively.

Emerging Issues in Pneumonia Treatment

The challenges in the treatment of pneumonia are significant, despite the availability of modern medical approaches and high technologies. This section examines in detail the main challenges faced in the treatment of pneumonia, their causes and possible solutions. First, one of the most important problems is antimicrobial resistance (AMR). Although antibiotics have been used as a mainstay in the treatment of infectious diseases such as pneumonia for many years, bacterial resistance to antibiotics is increasing. This situation makes it difficult to treat the disease in patients and prolongs the treatment process. According to WHO, in 2019, 1.27 million people worldwide died from bacterial infections resistant to antibacterial drugs. This problem also affects pneumonia, since many cases of pneumonia are treated with antibiotics. Second, the uneven distribution of modern medical services is also a significant problem. Patients in urban areas have better access to healthcare than those in rural areas. This makes it difficult to provide prompt and effective treatment for patients with pneumonia in rural areas. In addition, the limited resources of health facilities in rural areas make it difficult for patients to access necessary medicines and medical services. Third, the limitations of diagnostic methods are also a significant problem in the treatment of pneumonia. In some cases, the initial symptoms of pneumonia can be similar to those of other respiratory diseases. This makes it difficult to diagnose and treat the disease early. Modern technologies, such as computed tomography (CT) and X-rays, can help in the diagnosis of pneumonia, but these methods are not always available. Fourth, the lack of individual approaches to the treatment of pneumonia is also important. Each patient needs individual treatment based on his or her characteristics, history and severity of the disease. However, many health systems use standardized approaches, which makes it difficult to achieve optimal outcomes in some patients. Differences in the knowledge and experience of doctors can also make it difficult to provide an individualized approach. All of this suggests several solutions to the challenges of pneumonia treatment. First, it is necessary to develop new antibiotics and treatment methods to combat antimicrobial resistance. It is also important to educate patients about the inappropriate use of antibiotics and strengthen preventive measures. Second, it is necessary to allocate resources and expand medical services to improve health services in rural areas. This will directly help speed up the treatment of patients and improve their quality of life. It is also possible to improve diagnostic methods and introduce modern technologies, such as artificial intelligence, to increase the chances of early detection of pneumonia. For the final results, it is necessary to strengthen the individualized approach. Doctors should develop an individual treatment plan for each patient, as well as constantly monitor the condition of patients.

Future Research and Innovation

Future research and innovation will play an important role in the treatment of pneumonia. With the development of modern medicine and technology, new approaches, methods and tools are being developed in the treatment of pneumonia. This section will review the need, prospects and important directions of future research and innovation in the treatment of pneumonia. First, the development of new biomarkers based on modern research is important in the treatment of pneumonia. Biomarkers help in the rapid diagnosis and prognosis of the disease. For example, new biomarkers can be used to assess the severity of pneumonia and predict the response to treatment. Studies show that rapid analysis using biomarkers not only speeds up the treatment process, but also improves the overall condition of patients.

Second, innovative methods of therapeutic agents, such as gene therapy, are opening up important prospects in the treatment of pneumonia. Gene therapy can strengthen the immune system of patients and increase their ability to fight the disease. Studies show that gene therapy can help with severe forms of pneumonia, and this area requires extensive research in the future. Telemedicine and digital health technologies are also being seen as new ways to treat pneumonia. They allow patients to communicate with doctors remotely, monitor their condition, and improve the treatment process. Through telemedicine, patients can receive care in the comfort of their own homes and, if necessary, seek emergency medical care. This method is especially important for patients living in rural areas, as they have difficulty getting to city hospitals. Another important area is the development of vaccines and preventive measures. Pneumococcal vaccines and influenza vaccines are recognized as effective tools for preventing pneumonia. In the future, research on the development and widespread distribution of vaccines is necessary, as this will play an important role in preventing pneumonia. Research into improving vaccination programs and their popularization among the population may also be a key tool in the future fight against pneumonia. In addition, the use of artificial intelligence and machine learning technologies in the treatment of pneumonia is also one of the promising areas. With the help of programs created on the basis of artificial intelligence, it is possible to automate the diagnosis of pneumonia, individually monitor patients and prepare a treatment plan. These technologies provide more effective and individualized approaches for patients.

Modern Treatments

Pneumonia is an inflammation of the lungs, usually caused by bacteria, viruses, or fungi. Modern treatments play an important role in ensuring the effective control and treatment of pneumonia. This section focuses on modern treatments, their advantages, and uses. The mainstay of modern treatment is antibiotics and antiviral drugs. Antibiotics are mainly effective in treating bacterial pneumonia. In turn, in the case of viral pneumonia, antiviral drugs can be used, but often this condition resolves spontaneously. In addition to antibiotics, combination therapies are also widely used in modern medicine. For example, in the case of severe pneumonia, the use of several antibiotics together is important in stopping the progression of the disease. One of the modern treatments is symptom management and additional support. This mainly includes oxygen therapy and fluid maintenance. Depending on the severity of the disease and the patient's general condition, doctors may use oxygen machines to increase oxygen levels. Recreational and physiotherapeutic measures are also organized to improve the general condition of patients and strengthen their immune system. Vaccines also play an important role among modern treatment methods. For example, the use of vaccines against pneumococcal bacteria and influenza vaccines is important in preventing pneumonia. These vaccines are especially important for young children, the elderly, and patients with weakened immune systems. Vaccination helps reduce the spread of the disease and improves the health of the population. Another modern treatment method is the use of rapid diagnostics using biomarkers. Biomarkers allow you to quickly determine the presence of the disease and help doctors speed up treatment. In addition, online monitoring of patients through telemedicine is developing as part of modern treatment methods. This is especially important for patients living in remote areas, facilitating their communication with doctors and allowing them to monitor the treatment process. Modern medical treatments have opened up new avenues for treating pneumonia. One of them is personalized medicine. In this approach, a patient's genetic and environmental factors are taken into account and a treatment plan is created accordingly. This allows for more effective treatment that is tailored to the individual needs of patients.

Complications of Pneumonia and Their Prevention

Pneumonia complications and their prevention are important health issues. Pneumonia, in turn, is not only a disease that affects the respiratory system, but can also seriously affect other organs and systems. Complications usually occur depending on the severity of the infection, the patient's general health, and the treatment methods. Therefore, it is very important to develop and implement effective strategies to prevent pneumonia complications. Complications of pneumonia include changes in the respiratory system, fluid accumulation in the lungs, sepsis, and even death. For example, fluid accumulation in the lungs, called pleurisy, can reduce the patient's ability to breathe and cause additional infections. Sepsis is also the body's response to infection, which can disrupt blood circulation and damage vital organs. Such complications are especially common in elderly and immunocompromised patients.

To prevent such complications, it is necessary to take a number of preventive measures. First of all, vaccines play an important role in preventing pneumonia and its causes. Vaccinations against pneumococcal and influenza are recommended, especially for high-risk groups. Also, increasing the immunity of patients and maintaining a healthy lifestyle, including proper nutrition, physical activity and stress management, are important in preventing complications.

In addition, the use of modern medical approaches in the treatment of patients with pneumonia, such as rapid diagnosis and treatment based on the instructions of doctors, helps to reduce complications. Rapid diagnostic methods, such as the use of biomarkers, help to quickly determine the condition of patients and formulate the right treatment plan.

Also, the use of telemedicine technologies for monitoring and treating patients can be effective in preventing complications. This also creates the opportunity for patients to receive prompt medical care and facilitates the organizational work of doctors. The possibility of long-distance communication between doctors and patients is especially important in rural and remote areas. Public awareness and education are also important in preventing complications of pneumonia. Health services and public health authorities should encourage patients to take preventive measures by informing them about pneumonia and its complications. In particular, patients should be aware of their signs and symptoms, and seek medical attention when necessary. At the same time, new approaches and treatments for pneumonia and its complications continue to be developed through research and scientific development. Antimicrobial resistance, for example, remains a major problem in the treatment of pneumonia, so the need for the development of new antibiotics and treatment plans is constantly increasing. Increasing research is aimed at improving the quality of life of patients by introducing modern approaches and new technologies in the prevention of pneumonia complications.

Conclusion

In conclusion, modern treatment options for pneumonia offer a multifaceted approach to the disease, including antibiotics, vaccination, supportive care, and innovative technologies. Historically, pneumonia has been associated with high mortality rates in many countries, but advances in modern medicine, including the introduction of antibiotics, have led to significant changes in the treatment of the disease. By expanding our knowledge of the pathophysiology, diagnostic methods, and treatment protocols of pneumonia, it has become possible to improve the quality of life of patients and reduce costs to the healthcare system. Modern treatment options are of great importance, as they not only aim to eradicate the infection, but also to manage symptoms, support respiratory function, and prevent complications. However, the complexity of the disease and its diverse causes, including the decline in the effectiveness of antibacterial drugs, need to be addressed. Previous studies have shown that antibiotics, when used promptly and appropriately, in combination with supportive care, provide the best outcomes for patients. In the future, there are directions for the introduction of innovations in the treatment of pneumonia, such as the study of personalized medicine approaches, the development of rapid diagnostic methods using new biomarkers, and monitoring via telemedicine. These approaches may open new horizons in the treatment and prevention of pneumonia. In general, the importance of modern treatment methods for solving the problems associated with pneumonia and overcoming the disease will never be overestimated, and they also create broad opportunities for future research and innovation in the field of health care.

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XORAZM VILOYATI TURIZMINING RIVOJLANISH ISTIQBOLLARI

Annotatsiya: *Tadqiqot ishida Xorazm viloyatiga tashrif buyurgan sayyohlar, viloyatning turizm salohiyati, turistik obyektlar, ularning ayni damdagi holati bayon qilinadi. Viloyatda turizm sohasida kelajakda qilinadigan ishlar, yangi ishlab chiqilayotgan loyihalar to'g'risida turli fikrlar bayoni keltiriladi.*

Kalit so'zlar: *Turizm, turizm mahallalari, Xiva, "Ichan qal'a" muzey qo'riqxonasi, turistik obyektlar, muammolar, qal'alar, Qal'ajiq qal'a maskani*

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DEVELOPMENT PROSPECTS OF KHOREZM REGION TOURISM

Abstract: *Tourists who visited Khorezm region, tourism potential of the region, tourist objects, their current situation are described in the research work. Various opinions on the future work in the field of tourism in the region, newly developed projects will be presented.*

Key words: *Tourism, tourism neighborhoods, Khiva, "Ichan Castle" museum-reserve, tourist objects, problems, castles, Kal'ajyk Castle*

Turizm deganda, jismoniy shaxsning doimiy istiqomat joyidan sog'lomlashtirish, ma'rifiy, kasbiy, amaliy yoki boshqa maqsadlarda borilgan, joyda haq to'lanadigan faoliyat bilan shug'ullanmagan holda 24 soatdan kam bo'lmagan va 365 kundan oshmagan holda sayohat qilish tushuniladi. Turizm tarixi XIX asr boshlariga borib taqaladi. Dastlab Angliyadan Fransiyaga uyushtirilgan sayohat hisoblanadi. Turizmning asoschisi hisoblanmish ingliz ruhoniysi Tomas Kuk 1843-yil dastlabgi temiryo'l sayohatini uyishtiradi[4]. Hozirgi kunda turizm dunyoning juda ko'p mamlakatlarda ommaviy tus oldi. Odatda, turizm maxsus turistik tashkilotlar orqali turistik marshrutlar bo'yicha o'tkaziladi. Turizmning bir qancha turlari mavjud. Ular quyidagilar ichki, xalqaro, havaskorlik, uyishgan turizm, yaqin joyga sayohat, toqqa chiqish, avtoturizm, sport turizmi va boshqalar. Hozirgi kunda yurtboshimiz tomonidan yurtimizda turizmni rivojlantirishga kattta e'tibor berilmoqda. Turizm obyektlari holati yaxshilanmoqda, tarixiy obidalar rekonstruksiya qilinib ko'rinishi yaxshilanmoqda. Zero, yurtboshimiz aytganiday "Turizm – iqtisodiyotning muhim tarmoqlaridan biri. Mavjud imkoniyatlardan samarali foydalangan holda, ushbu tarmoqni yanada takomillashtirish zarur, buni davrning o'zi taqozo etmoqda" [1]. Darhaqiqat, hozirgi kunda turizm sohasini iqtisodiyotning eng yuqorisiga qo'ygan turizm davlatlari talaygina. Ularga Turkiya, Ispaniya, Italiya, Fransiya, Saudiya Arabistoni kabi turizm sohasi rivojlangan davlatlarni misol tariqasida keltirish mumkindir.

Xorazm viloyati ham hozirgi vaqtda O'zbekiston Respublikasidagi turizm rivojlangan viloyat hisoblanadi. Xorazm viloyati qadimdan o'zining boy tarixi, noyob tabiati bilan ko'pchilikda qiziqish uyg'otib kelgan. Bugungi kunda Xorazm viloyati hududida 256 ta ma'daniy me'ros obyektlari ro'yhatdan o'tkazilgan. Shulardan 18 ta arxeologiya, 133 ta arxitekura, 67 ta haykaltaroshlik, 6 ta diqqatga sazovor joylar, 32 tasi muqaddas joylar hisoblanadi [3]. "Osmon ostidagi muzey" sifatida e'tirof etilgan Xiva shahridagi "Ichan qal'a" muzey qo'riqxonasi ko'p yillardan beri sayyohlarni o'ziga jalb etib kelmoqda. Xorazm viloyatida nafaqat Xiva shahri, balki boshqa sayyohlarni jalb qiladigan boshqa go'zal joylar ham mavjuddir. O'zbekiston Respublikasi prezidenti Shavkat Mirziyoyevning 28.09.2002 yil 546-son "2022-2026-yillarda Xorazm viloyati turizm salohiyatini kompleks rivojlantirish bo'yicha qo'shimcha chora-tadbirlar to'g'risida"gi qarori qabul qilindi. Qarorga ko'ra, Xorazm viloyatining turizm salohiyatidan samarali foydalanish va uni jadal rivojlantirish, turizm infrotuzilmasini yaxshilash, kelgusi besh yilda viloyatda turizm xizmatlari hajmini keskin oshirish hamda ko'rsatilayotgan xizmatlar sifatini yaxshilash, shuningdek yangi ish o'rinlari yaratish ko'zda tutilgan. Ayniqsa, viloyatning turizm rivojlangan Xiva, Yangiariq, Shovot, Xonqa, Bog'ot kabi tumanlarida mavjud imkoniyatlardan foydalanish hamda ularni yanada rivojlantirish ko'zda tutilgan [2]. Xorazmning buyuk tarixini, buyuk Xorazmshohlar tarixini ko'rsatib berish, kelgusi avlodlarga ularning jasoratini anglatish maqsadida "Xorazmshohlar tarixi davlat muzeyi" tashkil etish ham ko'zda tutilgan. Bilamizki, Xiva Xorazmning asosiy turistik shahri. Shuni inobatga olgan holda, bu shaharda turistlarga xizmat ko'rsatishni yanada rivojlantirish muhum hisoblanadi. Bu borada shaharda ko'plab ishlar olib borilmoqda. Xiva tumanidagi "G'ovuk" MFY da turizm infratuzilmasini yaxshilash orqali 85 ta yangi ish o'rni yaratish ko'zda tutilgan [2]. G'ovuk hududida ekoturizm zonasi tashkil etilgan va sayyohlarni e'tiborini tortib kelmoqda. Mustaqillik yillarida ham Xiva shahridagi tarixiy obidalar, minoralar, maqbaralarning tashqi ko'rinishiga katta e'tibor berilgan. Ko'pchilik obidalar tashqi ko'rinishi talabga javob bermasligi aniqlangach, ularga zarar berilmagan holatda yangidan o'zgartirish kiritildi. Viloyatning Bog'ot tumani ham turizm rivojlangan hududlardan hisoblanadi. Bu yerda "Qal'ajiq qal'a" maskani joylashgan bo'lib bu yerdagi ko'l suvi shifobaxsh hisoblanadi. Sog'lomlashtirish maqsadida bu yerga mahalliy aholidan tashqari xorijliklar ham tashrif buyurmoqdalar. Bu qal'a ham qadimiy bo'lib, ko'pchilikda qiziqish uyg'otib kelmoqda. Hozirgi kunda bu hududga olib boradigan yo'llarni ta'mirlab, rekonstruksiya qilish ko'zda tutilgan. Prezidentimiz tomonidan qabul qilingan qarorlarga muvofiq turizm salohiyati rivojlangan hamda turizm drayveri sifatida rivojlantirish rejalashtirilgan tumanlarda quyidagi turizm mahallalari tashkil etish rejalashtirilgan:

Tuman (shahar) nomi	"Turizm mahallasi" nomi
Bog'ot tumani	"Qalajiqqal'a" MFY
Xiva tumani	"G'ovuk" MFY

Xiva shahri	"Yangi turmush" MFY
Xiva shahri	"Qumsayqa" MFY
Xiva shahri	"Kaptarxona" MFY
Xiva shahri	"Ichan qal'a" MFY
Xiva shahri	"Mevaston" MFY
Xiva shahri	"Kalta minor" MFY
Xiva shahri	"Yangi hayot" MFY
Xiva shahri	"Sangar" MFY
Shovot tumani	"Beshmergan" MFY
Yangiariq tumani	"Ostona" MFY
Yangiariq tumani	"Ulug'bek" MFY

Bu hududlarda turizmni yanada rivojlantirish va mavjud imkoniyatlardan foydalanish uchun ishlar olib borilmoqda.

Xulosa qiladigan bo'lsak, hozirda Xorazm viloyatida ham turizmni rivojlantirish uchun yetarli ishlar olib borilmoqda. Hududda tarixiy, ma'daniy turizm bilan birga, tabiiy sharoiti va hayot tarziga ko'ra qishloqlardagi turizmni ham rivojlantirish mumkin. Mavjud tabiiy-rekratsion sharoitlar milliy va hunarmadchilik buyumlari ko'rgazmalari tashkil etish, sayyohlar uchun turli bog'larga tashrif buyurib sayr qilish juda katta qiziqish uyg'otadi. Turli turizm rivojlangan xorijiy davlatlarni turizm yo'nalishida olib borayotgan ishlari va loyihalarini tarjiba sifatida olish maqsadga muvofiq hisoblanadi. Tashrif buyuruvchi sayyohlarga har tamonlama yetarli darajada xizmat ko'rsatish, ular uchun barcha sharoitlarni yanada sifatli tarzda yaratish lozim. Shundagina ularda yana tashrif buyurish hissi paydo bo'ladi. Yana turizmga aloqador mutaxasislar malakasi va bilimini ham oshirish lozim. Masalan, gid tarjimonlari qanchalik bilimli va muomalali bo'lsalar, shunchalik ko'p sayyohlarni o'ziga va turistik hududga jalb eta olishi, hudud haqida to'laroq ma'lumot berib ularda qiziqish uyg'otishi mumkin. Shu ishlarga e'tiborning yanada oshirilishi viloyatimiz turizm sohasida rivojlanishni yanada kuchaytirib, tashrif buyuruvchi sayyohlarning oqimini sezilarli ravishda ortib borishiga hissa qo'shadi. Bu esa iqtisodiyotga ham ancha foyda olib keladi va rivojlantiradi.

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MECHANISMS FOR INCREASING WOMEN'S ACTIVITY IN UZBEKISTAN

Abstract: *This article focuses on mechanisms for increasing women's activism in Uzbekistan, highlighting women's active participation in state and public life as part of ongoing reforms, as well as their important role in the country's political processes. In particular, the main factors of women's activity in the political, economic, and social spheres, as well as their participation in legislative initiatives and reforms, are examined. Special attention is paid to the issues of gender equality in their activities in state structures and international organizations. The study of this topic reveals the mechanisms that promote gender equality of women in society, their spiritual and intellectual support, and their participation in public administration and politics in Uzbekistan. In addition, emphasis is placed on empowering women and ensuring their active participation in decision-making processes.*

Keywords: *Women, mechanisms, legislation, public administration, political participation, gender equality, statistics, education, activism.*

Introduction

In modern society, an important role is played by increasing the activity of women. Dear President of our country Shavkat Miromonovich Mirziyoyev noted: "We must actively continue the state policy to protect the health of mothers and children, ensure employment, taking into account the living conditions of women, increase the role and authority of women in social and political life. We consider this our main duty." [Sh. M. Mirziyoyev, 2018, 39 p.] In our country, laws and state programs are being implemented aimed at increasing the activity of women in socio-political and cultural life, stimulating economic development, protecting their rights and interests, improving education and qualifications, acquiring professions and employment, as well as expanding their opportunities in the formation of civil society.

Greater involvement of women in social and political life by creating equal opportunities for their personal development in society not only increases their importance in their lives, but also creates a solid foundation for national development.

Main part

Today, in Uzbekistan, the increase in the activity of women in public life is considered as one of the key indicators of the country's development. In our country, the protection of the rights and interests of women, ensuring their active participation in all areas have been elevated to the rank of state policy. By the Decree of the President of our country “On measures to further improve the system of supporting women and ensuring their active participation in society”, No. PI-5020, dated March 5, 2021 was approved. In accordance with this decree: the goals were set to increase the participation of women in all spheres of the country’s economic, political, and social life, to provide comprehensive assistance in obtaining education, developing professional skills, and ensuring employment, to further support entrepreneurial initiatives, to create “Women’s Register” at the local level, and to systematically study, analyze, and resolve the problems, needs, and interests of women included in them, thus bringing this work to a qualitatively new level.[2]

The activity of women in public administration in Uzbekistan has become increasingly significant in recent years, and their participation in social, political, and economic life has grown. This process is being carried out by the country's leadership as part of reforms aimed at ensuring gender equality and supporting and strengthening women's rights.

Moreover, Article 58 of the Constitution of our country states: “Women and men shall have equal rights.

The State shall ensure equal rights and opportunities for women and men in the administration of public and state affairs and in other spheres of social and state life.” [3]

On September 2, 2019, the Law “On guarantees with respect to equal rights and opportunities for women and men” was adopted.[4] The Law “On protection of women from harassment and abuse” was also passed. In accordance with Article 5 of the Law “The main directions of the state policy in the field of protecting women from harassment and abuse”;

The main directions of the state policy in the field of protecting women from harassment and abuse shall be as follows:

-developing and implementing a gender policy, state programs and strategies in the field of protecting women from harassment and abuse;

-creating the atmosphere of intolerance to harassment and abuse of women in the society;

-ensuring protection of rights, freedoms and legal interests of women from harassment and abuse;

-enhancing legal awareness and legal culture in the society, strengthening the rule of law;

-creating effective organizational and legal mechanisms to prevent, reveal, eliminate harassment and abuse of women;

-taking measures to eradicate reasons and conditions which promote harassment and abuse of women;

-ensuring cooperation between state bodies, self-governing bodies of citizens, non-governmental non-profit organizations and other civil society institutions in order to prevent harassment and abuse has been established.[5]

As you know, the concepts and values of “Human-Family-Society-State” play an important role in the life of every country and every people. Without women, it is impossible to imagine the fundamental structure of society and family. As the First President of our country, Islam Abduganievich Karimov, said: “Those who unite our family and society, bring grace and blessings to them, and instill love, kindness, and compassion in our homes, are truly our revered mothers and sisters. Reason, kindness, and compassion keep the family balanced, pure, honest, sincere, and just. Honoring motherhood is a quality elevated to the highest value in our society. The more we treat women as the light of our lives, the colors of our existence, the more we will respect our families and our homeland.”[6]

The resolution of the Oliy Majlis of the Republic of Uzbekistan, approved by SI-297-IV “About the approval of the strategy of achieving gender equality in the Republic of Uzbekistan until 2030” dated May 21, 2021, is also aimed at ensuring equal participation of women in public administration and increasing their social and political activity. Chapter IV of this resolution, titled “Priorities of gender strategy implementation” includes Section II on “Ensuring Equal Rights and Opportunities for Women and Men in the field of Public Service” which states: “In order to ensure equal rights and opportunities for women and men in the field of public service, it is necessary to implement the following measures” in accordance with this Code, namely:

-to gradually increase the share of women in leadership positions by introducing the mechanisms of appointment to leadership positions of state bodies based on competitions;

-to strengthen the participation of women in solving socio-political issues in the life of society and in making decisions of urgent importance and in their implementation;

-to expand the opportunity of women to represent the state and the state body and organization in which they operate at the international level, and to participate in the work of international organizations;

-expansion of the practice of solving the problems that concern the population directly by women working in leadership positions;

-increase their activity in the socio-economic development of regions by expanding the practice of appointing women to leadership positions of local executive authorities;

-development of criteria for ensuring gender equality aimed at creating equal opportunities for promotion in state bodies and organizations based on the experience of advanced foreign countries;

-establishing systematic measures to improve the qualifications of women recommended for leadership positions in public authorities and management bodies at the Academy of Public Administration under the President of the Republic of Uzbekistan;

-to establish a system of training, retraining and upgrading the qualifications of experts on gender-legal examination of normative legal documents and their drafts;

-keeping information on the ratio of the number of women and men working in relevant positions in state bodies and organizations;

-strengthening the legal basis for conducting gender audits in state bodies and organizations based on a comprehensive gender approach, developing its principles, is planned.[7]

In the "Election Code" of the Republic of Uzbekistan, adopted in 2019, it is stipulated that the proportion of women among candidates for deputies must be 40 percent. In a single-mandate constituency, candidates will be nominated by political parties based on a party list."[8]

Considerable attention is given to the training of women, their career guidance, and professional development. In particular, the Law of the Cabinet of Ministers of the Republic of Uzbekistan, dated August 18, 2022, "On Measures to Streamline the Allocation of Educational Loans for the Training of Women in Higher, Secondary Special, and Vocational Educational Organizations on a Paid-Contract Basis" was adopted. The provision of this law stipulates that the principal debt on loans provided to women is to repayment of the main debt of the educational loan by the borrower within 7 years, starting from the seventh month after the end of the period of formal study of the relevant type of education in the educational organization.[9]

In Uzbekistan, the proportion of women in parliament reached 34.6 percent in 2023, compared to 6.0 percent in 1995. Although Uzbekistan introduced a 30 percent gender quota for parliamentary elections in 2004, this figure increased to 40 percent in 2023.[10]

In our country, cooperation with international organizations on women's rights issues is underway, and programs and projects related to women's rights are being implemented. The role of women in public and non-governmental organizations is being strengthened.

In conclusion, as emphasized by the President, "Currently, every woman must not only be an observer of democratic processes, but also an active initiator." From this, it follows that the opportunities and reforms being created for women in Uzbekistan are aimed at enhancing their activity.

The reforms being implemented in our country place great emphasis on increasing women's participation. Women are being provided with ample opportunities to actively participate in state governance, demonstrate their capabilities in various fields, enhance their influence in social life, ensure their rights, and contribute to the overall development of the state.

One of the most important aspects in increasing women's socio-political activity in society is identifying the following key criteria: purposefulness, hard work, determination, initiative, willpower, honesty, integrity, loyalty, a deep sense of high responsibility and personal accountability, good health, and a healthy lifestyle. With these criteria in mind, expanding the ranks of active women is one of the main tasks. The current reforms serve to further enhance their role in the socio-political life of the country.

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DEVELOPMENT OF ACCOUNTING POLICY IN UZBEKISTAN: THEORY AND PRACTICE

Abstract: *This article reveals necessity and significance of accounting policy in Uzbekistan. In addition, the article analyzes requirements for the development of the accounting policy and the factors influencing it, as well as the methodological foundations for the formation of accounting policy in reliance upon the international financial reporting standards. Furthermore, the article presents the considerations and opinions of economists on accounting policy, issues of improvement of the statutory acts related to accounting policy.*

Keywords: *accounting policy, selection of accounting policy, changes in accounting value, application of accounting policy.*

INTRODUCTION

Currently the globalization process taking place in the world is pushing economic growth between countries to even higher levels, forcing enterprises to reconsider their financial and economic activities and seek new opportunities for development. Recently there has been a demand for enterprises to have adequate research and practical methodological foundations for preparation and presentation of financial statements in compliance with international standards.

As it is known, the Resolution of the President of the Republic of Uzbekistan №4611 dated February 24, 2020 "On additional measures for the transition to international financial reporting standards" sets the objective of "...harmonization of national accounting standards in accordance with IFRS" [1]. Definitely, implementation of such essential objectives requires cooperation with industry specialists from relevant ministries and leading professors and academicians from higher education institutions. Currently the process of adjusting national accounting standards in compliance with the international financial reporting standards has been already launched is continuing effectively (up to now about 10 National Accounting Standards (NAS) have been adjusted in compliance with the international standards and the process is still going on).

LITERATURE REVIEW

Many definitions and different approaches have been given to the concept of accounting policy by international and national economic scholars and industry experts (auditors, accountants, analysts). It is obvious that all these definitions cover the single purpose, that is, the accounting policy consists of a set of rules aimed at maintaining accounting records and compiling financial statements.

The following definition is provided in IAS № 8 “Accounting Policies, Changes and Errors in Estimated Estimates”: *Accounting policies* are specific principles, frameworks, generally accepted conditions, rules and practical approaches used by an entity in preparing and presenting financial statements [2].

The description given is clear and directed for the right purpose. In practice of the Republic of Uzbekistan we can see that it is approached a little differently. For example, the following definition is provided in the national standard: “...Accounting policies represent the specific principles, conventions, procedures and practices that an organization uses to prepare and present financial statements” [3]. This definition illustrates that the head of the economic entity is approached as a person responsible for the simultaneous management of accounting and the formation of accounting policies. If we refer to foreign experience in the matter of the definitions given to the accounting policy and the opinions expressing its content, it is obvious that the accounting policy serves a common purpose. In the legislation of the Russian Federation, the accounting policy is defined as follows: “...the accounting policy of an entity is understood as a set of accounting methods adopted by it - preliminary observation, cost measurement, current grouping and generalization of economic processes. Accounting methods include grouping and evaluating economic activities, paying the value of assets, economic processes, arranging inventory, applying accounting chart of accounts, shaping accounting registers, and processing and summarizing data” [4].

India has been efficiently applying the IFRS. The accounting policies and their development in the Indian Accounting Standards (Ind AS) are fully aligned with the requirements of the International Accounting Standards (IAS). For example, there is almost no difference between the definition of accounting policy and the definition given in IFRS: “Accounting policies are the specific principles, bases, conventions, rules and practices applied by an entity in preparing and presenting financial statements”[5]. This standard specifies that the requirements for disclosure of accounting policies, except for disclosure of changes in accounting policies, are set out in Ind AS1 “Presentation of Financial Statements”.

According to Japanese accounting standards: “Accounting policies are specific principles and procedures that a company uses in preparing financial statements for the company management.This includes any accounting methods, valuation systems, and rules for information disclosure”. Under conditions of globalization, the Accounting Standards Board of Japan (ASBJ) has issued a statement on the revision of Standard №24 “Disclosure of Accounting Policies, Changes in Accounting Policies and Corrections of Errors” (this statement is available only in Japanese) [6].

Principles for Disclosure of US Accounting Policies (APB 22) state that “Accounting policies of companies are specific principles and methods of accounting in the preparation of financial statements in compliance with generally accepted principles of accounting, which are aimed at providing reliable information about the financial condition, cash flow and financial results of the management of companies”.

The following definitions and considerations have been given by scholars and economists in the preparation and improvement of the accounting policy in compliance with the international financial reporting standards in the Republic of Uzbekistan. In this regard from the point of view of A.A. Karimov, “Accounting policy is the specific principles, bases, rules and practical approaches used by the company in preparing and presenting financial statements” [7].

A.K.Ibragimov expressed the following opinion: “Accounting policy is a specific set of principles, bases, conditions, rules and practices adopted by the bank to reflect transactions, ensure control, and prepare and present financial statements” [8].

A foreign scholar-economist L.R. Smirnova thinks that “The accounting policy of commercial banks should include the accuracy of the calculation of essential options for various operations, as well as the ability to plan and assess taxes, which are integral to the formation of the accounting policy of commercial banks” [9].

V.P. Astakhov has formulated the following definition of accounting policy: “Accounting policy is an order of accounting methods, which consists of initial observation of the fact of economic events of charter and other activities, evaluation in terms of value, current grouping and final summarization” [10]. In his previous research papers the author has worked out the following definition of accounting policy: “Accounting policy is understood as a set of acceptable methods and rules adopted by the head of an economic entity in reliance upon alternative principles, conditions and rules for organizing, maintaining accounting records and preparing and submitting financial statements” [11]. According to the point of view of another Russian scholar E.P. Kozlova, “Accounting policy of an entity means a set of accounting methods chosen by it: initial observation of facts of economic activity, expression in value scale, current grouping and final summation” [12]. A.Kh.Pardaev thinks that “A company’s accounting policy is a set of forms and methods of accounting that are essential for the company itself and are defined and published based on its general rules” [13]. According to A. Polkovskiy, “The accounting policy of the company is a set of methods of accounting: initial observation, expression in the value scale, current grouping and summarization of business operations” [14].

From the point of view of N.Yu. Juraev, “Accounting policy is an accounting system selected and announced by the company from among the alternative methods and forms of accounting permitted in the statutory acts regulating the activities of economic entities” [15]. In the opinion of N.Lyubishin, V.Jarinov, “Accounting policy is chosen by the enterprise in compliance with its economic conditions, a set of accounting methods, that is, a preliminary observation of the accounting method, value measurement, the methods of grouping and generalization” [16]. Based the accounting policy of business entities on certain rules and principles B.A. Khoshimov expressed the following opinion:“It is necessary to establish such a set of principles and rules that, when applied in practice, should ensure maximum accounting efficiency” [17].

K.B. Urazov gave the following definition: "Accounting policy is understood as an internal statutory act that embodies specific legal methods of accounting and financial reporting selected by the head of an economic entity and serves to fully satisfy the information needs of users" and considered it appropriate to include it in IAS № 1 [18]. In the opinion of N. Kondrakov, "Accounting policy is defined as the company's selection of the most appropriate of the permitted options for valuing accounting objects, as well as the selection of forms and techniques for organizing and maintaining accounting, based on established permissions, requirements and the characteristics of its activities" [19]. N. Shchadilova believes that "Accounting policy of the enterprise is the choice of certain and specific methods, forms and techniques of accounting by the enterprise based on the established rules and characteristics of the company's performance" [20]. Another economist, B. Juraev, who conducted the research on the formation of accounting policies, formulated the following definition: "Accounting policy is an internal regulatory document consisting of a system of interconnected principles, requirements, forms, methods and means, formed by an economic entity from alternative options approved by statutory acts for organizing, maintaining accounting records and drawing up financial and other reports" [21].

The general conclusions given to the accounting policy can be made that the accounting policy is the instructions and procedures for drawing up, preparing and presenting the financial statements of companies and gives a clear understanding of the financial situation of the company. However, in our opinion, the approaches given to accounting policy in the research papers of these scholars, the issues of accounting policy formation have not been researched based on the requirements of international financial reporting standards. Thus, current demands require paying particular attention to the development of accounting policies in compliance with international standards. In addition, the research papers the above-mentioned economists has greatly contributed to the development of the theoretical aspects of this article.

Summarizing theconsiderations specified above, the following definition has been developed: *accounting policy is a set of certain principles, methods, customs, rules and practices used by a business entity in the preparation and presentation of financial statements*.

RESEARCH METHODOLOGY

Such research methods as logical thinking, analysis and synthesis, induction and deduction, systematic approach, monographic observation, statistics, economic analysis and economic-mathematical analysis, as well as accounting methods in the formation of accounting policy have been widely used in the research.

RESULTS AND DISCUSSION

Accounting policy is one of the significant standards that companies must set up. In turn, there are some controversial issues, namely, whether an accounting policy is required for business entities, if so, what requirements are imposed on it, what benefits does an accounting policy have for the entity,whether it makes an impact on the formation of financial statements, is it possible to directly copy the international standard, or how can the national standard on accounting policies be adjusted in compliance with the international standard, and if accounting policies should or should not be formulated in a uniform manner. The main goal of business entities is to provide users with transparent and reliable accounting (financial reporting) information, so accounting policies should serve this purpose. Therefore, as we shift to international standards, first of all, we need to harmonize the national accounting policy standard with the international one. This is also known from the experience of foreign countries, that is, the accounting policy is aligned with the requirements set at the international level, and focus is made on the concept of creating and presenting financial reporting.

In our practice, we can see the opposite, that is, there is an increasing interest in drawing up financial statements directly without developing accounting policies and improving their methodological foundations, or rather, a transition to transforming them in accordance with international requirements. This is one of the weaknesses in our practice of accounting and financial reporting, which means that we must first carefully formulate the accounting policy and fully adjust it in compliance with the international standards. In our opinion, the set goal (preparation of financial statements) can be achieved only if the accountant's work plan (accounting policy) is correctly and accurately formulated in compliance with the business plan of the economic entity.

In the practice of international accounting, the economic entity divides accounting policies are divided into conservative and aggressive accounting policies. "Accounting policies are the rules and guidelines chosen by a company to be used in preparing and presenting financial statements. Accounting policies are essential because they set the basis on which all companies operate and provide a standard and consistent set of financial statements that are comparable across years and across companies". International Financial Reporting Standards (IFRS) and Generally Accepted Accounting Principles (USGAAP) are two benchmarks that provide guidance on how companies should prepare financial statements.IFRS are more principles-based and therefore can better understand the economic essence of any transaction. On the other hand, US GAAP is a more rules-based approach. The differences between the two approaches are evident in the different standards related to accounting policies *(for example, some accounting policies permitted under GAAP may not be permitted under IFRS)*. Accounting policies can be very diverse, but they are all included in the standards established by IFRS or GAAP. The following list mentions some of the main policies used by companies (these are definitely the main components that can be in an accounting policy, which may vary by industry): *choosing a consistent accounting policy, valuation of fixed assets, depreciation and inventory policy, valuation of investments, research and development expenses, accounting for actual or current costs, leasing accounting, goodwill accounting, recognition of profit on long-term contracts, accounting for contingent liabilities*.

Conservative accounting policy focuses on understating the financial results of the economic entity in the reporting period and overstating the financial results and related indicators of the following periods. Selecting this form of accounting policy has been considered a more sustainable approach that would allow business entities to improve over the years and demonstrate an upward trend in their financial performance. Most importantly, a conservative accounting policy is a positive thing for investors, as they have information that the business entity's performance (business) is improving over time.

An economic entity that chooses an aggressive policy overestimates its past performance, meaning that the accounting policy used is aimed at overestimating performance in previous years. However, in recent years there may be circumstances that result in a decline in the economic entity's performance. Therefore, caution is required when selecting this policy, as an aggressive accounting policy may cause some concern for auditors or investors in the future (the risk of managers providing incorrect information about a declining entity increases). Moreover, in international practice accounting policies can be chosen by economic entities not only from the perspective of preparing financial statements, but also from the perspective of managing profits in reliance upon established rules. Recently done research demonstrates that the concept of accounting policy can be interpreted in a variety of ways in various statutory acts and other works.In particular, the analysis of published scientific papers demonstrates that such concepts as "accounting policy", "accounting policy of an economic entity", "accounting policy of an enterprise", "accounting policy of an entity" are widely used. There is a definite necessity to create a unified normative basis for different approaches and interpretations of accounting policies.

Statutory acts used in shaping the accounting policy have been analyzed by two levels:

first, the requirements for the formation of accounting policy at the international level and its procedure;

second, the normative basis of the formation of accounting policy at the national level.

The regulatory legal framework has been recently created in Uzbekistan and practical measures are being undertaken to bring the existing accounting and financial reporting system into line with International Financial Reporting Standards (IFRS).In particular, in compliance with the Resolution of the President of the Republic of Uzbekistan №4611 dated February 24, 2020 "On Additional measures for the transition to International Financial Reporting Standards", joint-stock companies, commercial banks, insurance companies, and legal entities included in the category of large taxpayers started to conduct accounting based on IFRS from January 1, 2021. Therefore, current trend is that in the formulation of the accounting policy it is necessary to develop it in reliance upon the requirements of international standards.

One of the single international documents on accounting policies is the international standard called IAS№1 "Accounting Policies, Changes in Accounting Estimates and Errors". The objective of this standard is to prescribe the criteria for selecting and changing accounting policies, together with the procedure and disclosure for accounting for changes in accounting policies, changes in accounting estimates and corrections of errors, as well as to enhance the relevance and reliability of an entity's financial statements and their comparability with those of previous periods and with those of other entities. In addition, requirements for disclosure of accounting policies are set out in International Accounting Standard №1 "Presentation of Financial Statements". Another important point is that the standard has now been officially translated into Uzbek and is recommended for use.In this regard, in compliance with the Regulation "On the Procedure for Translating International Financial Reporting Standards Documents and Amendments to them into the State Language" in Appendix 1 to the Order of the Ministry of Economy and Finance of the Republic of Uzbekistan №23-57 dated March 20, 2024, the IFRS Foundation establishes the translation of new changes or amendments to IFRS documents into the state language on the annual basis.

In this regard, additions and amendments are being made to the current version of IFRS documents based on the 2022 edition approved by the IFRS Foundation. Currently, projects have been developed based on the 2022-2023, 2023-2024 revisions of the IFRS standards and interpretations adopted by the IFRS Foundation.

In reliance upon this project, comparative tables on changes in a number of international standards (IAS and IFRS) have been developed and put into practice with the appropriate justifications. In these additions and amendments, the definition of accounting policy remained almost unchanged. In particular, it is as follows: "Accounting policy is the specific principles, bases, generally accepted conditions, rules and practical approaches used by the company in preparing and presenting financial statements". However, the following sentences mentioned in the standard are planned to be excluded, including:

"*A change in a book value is an adjustment to the book value of an asset or liability or the amount of periodic consumption of an asset as a result of assessing the current state of assets and liabilities and the expected future benefits and obligations associated with them. Changes in book values arise as a result of new information or developments and, therefore, are not considered corrections of errors".*

Table 1.

International regulatory and legal bases in the accounting policy development[20]

№	International act	Content
	According to International Financial Reporting Standards (IAS, IFRS):	
1.	IAS№8 "Accounting policy, changes and errors in accounting estimates"	It establishes the criteria for selecting and changing accounting policies, along with the procedure and disclosure of changes in accounting policies, changes in accounting estimates, and corrections of errors. Moreover, it aims to raise relevance and reliability of

[20]Developed by the author in reliance upon the research.

		financial reporting and its comparability with financial reporting from previous reporting periods and with that of other entities.
According to Generally Accepted Accounting Principles (USGAAP):		
2.	Statement on Financial Accounting Concepts –SFAC (USA).	Conecting income and expenses. If an event affects both income and expenses, it is recognized in the accounting period in which it occurs and, most importantly, the elements of financial statements (assets, equity, and liabilities) are measured and reflected in the basic principles.

Another essential international regulatory basis for accounting policy is the US GAAP system, which is recognized as the benchmark for accounting in the international arena. Accounting policies in this GAAP mainly include the following:

Concept. Choosing rules and developing them in reliance upon an important decision.

Compliance and change:

first, all changes in accounting policies must be disclosed in the notes to the financial statements*;*

second, the retrospective program. Its limitations and adjustments must be reflected.

In US GAAP, accounting is regulated by accounting policies:

first, rules on financial accounting concepts that define its basic principles;

second, rules on financial accounting standards that define the basic rules for its conduct;

third, interpretations that change and supplement standards;

fourth, technical bulletins, which are explanations provided to users on specific issues of application of standards and interpretations*;*

fifth, rules of the working group on problems that arise in non-standard situations that do not correspond to existing standards.

The Republic of Uzbekistanhas already elaborated the regulatory and legal basis for the development of the accounting policy and setting up its unified methodological basis. It is true that today these regulatory frameworks require coordination and harmonization with the requirements of international standards.

The Law of the Republic of Uzbekistan “On Accounting” can be considered the primary regulatory document on accounting policy.This law is also being amended based on international requirements, for example, the name of the law is being changed to “Accounting and Financial Reporting” and its articles are being adjusted in compliance with international standards. Articles 9-10 of the above law specifically address the regulation of accounting and reporting, as well as national accounting standards.In general, all articles of the law contain techniques that must be reflected in the company’s accounting policy. For example, the purpose of the law is stated in Article 1, the same procedure is reflected in the general section of the accounting policy of the company: “The purpose of this Law is to regulate relations in the field of accounting organization, management and reporting”.

Furthermore, Article 8 of the law specifies synthetic and analytical accounting. This is directly related to the rules that should be reflected in the technical section of the accounting policy: “Synthetic accounting is implemented by generalizing information about accounting objects according to certain economic characteristics according to the procedure established by law.

Analytical accounting is implemented in a manner independently determined by the accounting entity in order to form detailed accounting information about accounting objects”.

Another aspect of the mutual interdependence and similarity between the articles of the law and the accounting policy concerns Article 17 of this law. It is this article that addresses the issue of valuation of assets and liabilities. The rules of the methodical section of the accounting policy also focus primarily on the procedure for evaluating the elements of financial statements: “Inventory is valued at the lower of the two following values: actual prime-cost (purchase price or production prime-cost) shaped at the balance sheet date or market price (net realizable value)”.

Table 2.

National legal basis of accounting policy development[21]

№	Statutory act	Content
1.	Law of the Republic of Uzbekistan “On Accounting”. (Law of the Republic of Uzbekistan-404, April 13, 2016)	Article 4. Accounting is a systematic system of collecting, recording, and summarizing accounting information through a comprehensive, continuous, and documented accounting of all business transactions, as well as the preparation of relevant financial and other reporting. Article 10.Accounting standards set minimum requirements for accounting and financial reporting.
2.	Tax Code of the Republic of Uzbekistan. January 1, 2020	Article 77. Accounting policies for tax purposes The accounting policy for taxation purposes is determined independently by the taxpayer. In this case, the accounting policy is approved in a voluntary form.
3.	National Accounting Standard of the Republic of Uzbekistan (NAS №1) “Presentation of Financial Statements and Accounting Policies”. 2024.	Section 6. In this IFRS accounting policies are understood as the set of methods, principles and foundations, used by the head of a company to maintain accounting records and prepare financial statements.

Moreover, the main aim of accounting policies is to set methods and rules aimed at preparing financial statements, and Article 22 of the law provides the data about financial statements: “Financial reporting consists of systematic information about the financial status of the accounting entity as of the reporting date, the financial result of the activity during the reporting period, and the movement of funds”. From the comparison of the law and the accounting policy, it is known that the main aspects of the accounting policy are expressed in the statutory act.

[21]Developed by the author in reliance upon the research.

Another essential regulatory basis for accounting policies at the national level is the current National Accounting Standard of the Republic of Uzbekistan (NAS) №1 "Presentation of Financial Statements and Accounting Policies" (registered by the Ministry of Justice of the Republic of Uzbekistan №3544 on August 6, 2024). This national standard defines accounting policies as follows: *".... accounting policies imply a set of methods, principles and foundations, used by the head of the company to maintain accounting records and prepare financial statements".*

We would like to express some considerations on sections 6-8 mentioned in the National Accounting Standards specified above.

firstly, in our opinion, it would be appropriate to replace the word "*Head*" in the given definition with the word "*Chief Accountant*." Accounting and financial reporting in an entity or enterprise are carried out not directly by the manager, but by the accountant and his assistants. It is true that here the head of the company can lead the overall accounting, but the accountant participates in all the processes of recording economic events in accounting, summarizing it, reflecting it in registers, drawing up, formulating and presenting financial reports in reliance upon various principles. If we refer to international standards, we note that the term or definitions given to accounting policies in international regulations do not mention the head of the company, for example, the term given in international IAS №8: "*Accounting policy* is the specific principles, bases, generally accepted terms, rules and practices applied by an entity in the preparation and presentation of financial statements".

Therefore, in our opinion, it is appropriate to define the above definition as follows: "*.... accounting policy implies a set of methods, principles and bases used by the chief accountant of an entity or his deputy to maintain accounting records and prepare financial statements*";

second, another paragraph of the current NAS №1 provides the following statements: "*The accounting policy of the company is developed by the head of the company based on the NAS so that the financial indicators of the company's performance presented in the financial statements for different years are comparable*".

It should be noted that, the accounting policy, which is developed for the purpose of comparing financial statements, is directly indicated by the head of the company. The financial indicators presented in the financial statements of the company or enterprise are developed by the accountant. General reports and conclusions resulting from the calculations of these indicators are presented to the management. Therefore, in our opinion, it is appropriate to reword this paragraph as follows: *"The accounting policy of the company is developed by the chief accountant so that the financial indicators presented in the financial statements of the company's activities for different years are comparable".*

CONCLUSION

It can be concluded that accounting policies in enterprises can be implemented for two purposes:

firstly, accounting policies for accounting purposes (aimed at preparing financial statements);

secondly, accounting policies for tax purposes of the enterprise.

Thus, without an accounting policy, no entity or enterprise can efficiently organize its activities. Accounting policies are developed separately for accounting and tax accounting. The implementation of both accounting policies requires the accountant to have extensive methodological and practical experience.

It should be noted that the Tax Code of the Republic of Uzbekistan provides for alternative calculation methods on many issues. Taxpayers are given the right to independently choose one or another method, recording their choice in the calculation policy.

A well-designed accounting policy for tax purposes helps to avoid disputes with tax authorities and avoid paying excessive taxes. Research demonstrates that accounting rules differ from those established in tax legislation.

The primary aim of accounting is to provide general purpose financial statements to users in an unbiased manner. This objectivity enables to include values in financial statements based on assumptions, even if they are often far from accurate.

From the considerations specified above, it can be concluded that in international practice, the choice of accounting policy by business entities not only results in the efficiency in terms of preparing financial statements, but also in terms of managing profits based on established rules.

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DETERMINE THE SPEED OF THE VEHICLE

Abstract. *In this paper, Vehicle speed detection and estimation is an important task for many traffic control and safety systems. In this study, we propose a new computer vision-based method for real-time vehicle speed estimation and detection. To detect cars and determine their speed, our system first analyzes video images of moving vehicles using image processing algorithms. On a dataset of real traffic scenarios, we test the proposed algorithm and the results show that it performs very well in terms of accuracy.*

Keywords. *OpenCV software, time identifier, model window, optical flow, PPM (pixels per meter), radar, Supabase and MongoDB database, video data, cascade classifier, real-time mode.*

Introduction. Over the past few years, the number of road accidents has significantly increased due to the rise in the number of vehicles on the road. Monitoring and controlling vehicle speed in specific areas or zones is crucial. Road traffic safety. Although methods for measuring speed using radar are regularly employed for this purpose, they may have some limitations, such as identifying smaller vehicles with weak radar reflections or errors in detecting vehicles that change speed very quickly or frequently. As a result, there is a growing demand for more precise and effective systems to calculate the speed of moving vehicles.

In research, programs based on Python, OpenCV, NodeJS, Supabase, and MongoDB are used to develop software for detecting vehicle speed. The development process of the software is described step by step, including tools, tables, and algorithms. The requirements for the application, including functions, necessary models, and safety issues, are thoroughly analyzed.

For detecting objects on the road from images, OpenCV is chosen. At this time, the effectiveness and efficiency of these tools in object detection tasks have been recognized. For web development, NodeJS is selected for its extensive capabilities in integrating FRONTEND and BACKEND radar detector technologies.

MongoDB (NOSQL) and Supabase (PostgreSQL) are two types of databases used to create a database for storing user information and calculating speeds for related vehicles. These databases provide high scalability and manageability in storing security information and unprocessed data, enabling the implementation of an object detection model for managing large data sets effectively on the OpenCV-powered backend of a website, implemented with Pyt and Nodejs.

The databases - MongoDB for user registration and login to the system. Supabase is a database for creating user interfaces using HTML and JavaScript programs for user registration and login to identify the vehicle and speed identifiers. The user interface is created using model views and components designed for user registration and login.

The algorithm for calculating vehicle speed is performed in the following sequence:

1. Import the necessary libraries: Supabase, Os, Cv2, Dlib, time, Math, Dotenv.

2. Establish connection to the Supabase database using the provided URL and key.

3. Load the cascade classifier for vehicle detection.

4. Open the video file for processing.

5. Set the width and height for processing the video frames.

6. Define the "Estimatespeed" function to calculate the speed based on the location of the vehicle along the trajectory.

The model for detecting and classifying vehicles' location and speed is implemented using the HAAR CASCADE program. The system for calculating vehicle speed utilizes image pixel manipulation and processing through OpenCV. By leveraging computer software from OpenCV, we have developed a system to determine vehicle speed in this research. The technology captures vehicle speeds in video images, allowing for real-time speed detection and monitoring. Various methods for image processing, such as image resizing, contour identification, and evaluating vehicle location, are available.

After placing the vehicles on the road tracks, their speeds are determined by calculating the distance covered over a certain period. Subsequently, this data is stored in a database for future monitoring and analysis. The system's operation involves processing the written images according to standards, including accuracy, processing speed, and efficiency in calculating speed.

Method: The research results showed that the proposed vehicle speed detection system using OpenCV effectively demonstrated high accuracy in real-time detection and monitoring of vehicle speeds, proving its capabilities in accurately identifying vehicles under various road conditions and lighting environments.

Furthermore, the processing speed of the system was sufficient for real-time applications, allowing for immediate access to and control of vehicle speed data. However, it should be noted that the system's performance may be affected by factors such as the camera object, camera dimensions, and weather conditions. Therefore, further research may be necessary to optimize the system's robustness under such conditions.

One of the potential areas for improvement is the integration of vehicle learning methods such as deep learning. Convolutional neural networks can enhance the detection and adaptability of this system to various scenarios. Additionally, incorporating more complex tracking algorithms, such as Kalman filters or particle filters, could lead to improved tracking efficiency and speed estimation.

Results: In conclusion, the vehicle speed detection system developed using OpenCV demonstrates promising results in real-life applications, offering valuable tools for traffic management and law enforcement. Future research and development could help optimize this system and expand its application in various transportation conditions and environments.

The potential applications of the proposed approach include traffic monitoring, law enforcement agencies, and intelligent transportation systems. Overall, this research contributes to the development of accurate and efficient methods for detecting and assessing vehicle speeds, which can significantly enhance traffic management and safety. The problem description, proposed solution, learning methods, and findings are briefly outlined. This highlights the contribution of the research and emphasizes its significance and potential applications.

This article presents a unique method for quickly and accurately assessing the speed of moving vehicles without the use of expensive sensors like radars. The proposed solution integrates into a video stream of moving cars and filters the data to calculate their speed. The process is divided into four main categories, which can be grouped based on the necessary components to accomplish the task:

1. Defining the area of interest through video: This involves identifying the specific area in the video where vehicle detection will occur.

2. Detecting vehicle objects from video frames: In this step, computer vision techniques are employed to recognize and track vehicles within the video frames.

3. Using the PPM (pixels per meter) algorithm to evaluate the speed of moving objects:This algorithm is crucial for determining the speed of vehicles by analyzing the distance covered over time in the video frames.

4. Creating a precise file image to record the vehicle's speed and

the image of the vehicle moving at that speed: This final stage involves saving both the detected speed and the corresponding image of the vehicle in a single file for further analysis.

The significance of this research lies in its potential to provide accurate and effective methods for determining vehicle speed, which can enhance traffic management and safety. The proposed solution is applicable in various fields, including transport monitoring, law enforcement, and intelligent transport systems.

This article details a proposed methodology, including the methods and algorithms used to measure the speed of moving vehicles. Section 2 also presents the experimental setup and evaluation results for the proposed strategy. Our findings indicate that the proposed method improves upon traditional methods in accurately determining the speed of moving vehicles.

The proposed approach, along with the methods and algorithms used to measure the speed of moving vehicles, is fully explained in Section 2. The experimental setup and evaluation results for the proposed strategy are presented in Section 3. The study concludes in Section 4 with a discussion of the contributions, potential applications, and future development of the proposed approach. The detection model implementation is based on OpenCV. The website backend implementation will be done using Python and Node.

In **conclusion**, road traffic management and law enforcement agencies can greatly benefit from the implementation of an automated vehicle speed detection system. The system can accurately detect and monitor vehicle speeds in real-time. Utilizing computer vision methods like OpenCV, and potentially incorporating more sophisticated tracking algorithms by analyzing vehicle flow and adding complexity, allows for increased speed detection accuracy, identification of violations, provides valuable data for traffic analysis, and contributes to improved overall road safety.

While the current system shows promising results, further testing and optimization are needed to ensure its robustness and efficiency under varying conditions such as camera positioning, weather, and lighting. Vehicle speed detection systems are projected to become even more valuable tools for promoting safety, and as computer vision and vehicle speed detection technology continues to advance, it encourages more responsible driving behavior on our roads.

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HOW SEMANTIC CONCEPTS AND FRAMES SHAPE OUR UNDERSTANDING

Abstract. *We navigate the world through language, but beneath the surface of words lies a complex system of meaning. This article explores two fundamental concepts in linguistics: semantic concepts and frames. Semantic concepts are the building blocks of meaning, while frames represent the structured knowledge we use to interpret situations. By understanding how these tools work, we can gain a deeper appreciation for how we think, communicate, and make sense of the world around us. We'll explore examples from everyday life, demonstrating how these seemingly abstract ideas are at play in our daily interactions.*

Keywords: *semantic concept, semantic frame, cognitive linguistics, linguistic constructs,*

Introduction

Have you ever wondered how a single word can evoke a whole scene in your mind? Or how a seemingly simple conversation can carry so much meaning? Linguistics, the science of language, delves into these very questions. Two powerful tools that help us understand meaning are semantic concepts and frames. These are not just academic jargon; they're the secret ingredients that shape how we interpret everything from a casual conversation to a complex news article. Understanding them can open a new window onto the workings of our minds.

Methods

This article relies on a review of key linguistic theories concerning semantic concepts and frames. Specifically, we draw upon cognitive linguistics, which emphasizes the role of experience and mental representations in shaping language use. We will explore these concepts through illustrative examples, demonstrating their relevance to everyday communication. No formal data analysis is conducted; rather, the focus is on conveying complex ideas in an accessible manner using well-established theoretical frameworks.

Semantic Concepts: The Building Blocks of Meaning

At the heart of our understanding lie **semantic concepts**. These are mental representations of categories, ideas, or objects. Think of them as the fundamental units of meaning that your brain uses to make sense of the world. A concept isn't just a definition; it's a rich network of associations, attributes, and experiences.

For example, take the concept of “*dog*.” It's not just the definition, “a domesticated canine animal.” Your concept of *dog* is also shaped by your personal experiences: maybe you picture your childhood pet, or a playful puppy you saw at the park. Your concept of *dog* might include the image of a furry creature, the sounds of barking, and perhaps even the feeling of a wet nose nuzzling your hand. Everyone's concept of *dog* will be slightly different, reflecting their unique experiences.

Here are some things that make semantic concepts particularly interesting:

- **They are graded:** Some members of a category are "better" examples than others. A robin is a “better” example of a bird than a penguin. This is because we often think of categories in terms of prototypical examples.
- **They are fuzzy:** Boundaries between concepts are not always clear. Is a tomato a fruit or a vegetable? Depending on your perspective (culinary vs. botanical), the answer may vary.
- **They are linked:** Concepts don't exist in isolation. They’re interconnected, forming complex webs of meaning. The concept *dog* is linked to *pet*, *animal*, *furry*, *loyal*, and countless other concepts.

Frames: The Contextual Blueprint for Understanding

While semantic concepts are the building blocks, **frames** provide the structured context needed to make sense of situations. A frame is a mental structure that organizes our knowledge about a typical situation or event. Think of it like a script for a particular scene.

Consider the *restaurant frame*. This frame includes expectations about:

- **Roles:** Customer, waiter, chef
- **Props:** Menu, table, chairs, food
- **Actions:** Ordering, eating, paying the bill
- **Setting:** Dining area, kitchen

When you hear a phrase like, “Could I have the check, please?” you instantly activate the *restaurant frame*, even if you’re not physically in a restaurant. This frame helps you understand the utterance and anticipate the next steps in the interaction.

Frames are essential for communication because they allow us to make inferences. If someone says, “My soup is cold,” we understand they're probably unhappy and might want the waiter to do something about it, even though this is not explicitly stated. The *restaurant frame* provides the context needed to infer meaning beyond the literal words.

Here are some key features of frames:

- **They are culturally influenced:** Different cultures may have different frames for the same situation. What's considered polite behavior in a restaurant in one culture might be different in another.

- **They allow for defaults:** Not every detail needs to be explicitly stated. We assume certain things based on the frame. If someone says, “I'm going to the beach,” you assume there will be sand, water, and probably sunshine.
- **They are dynamic:** Frames can be updated and modified as we gain new experiences. Our understanding of the *restaurant frame* might change if we visit a unique dining establishment.

Examples in Action

Let's look at how semantic concepts and frames operate in everyday language:

- **The word "bank":** The semantic concept of *bank* can refer to a financial institution (e.g., “I need to go to the bank”) or the side of a river (e.g., “Let’s sit on the bank”). The specific *bank* concept that comes to mind depends on the frame activated by the surrounding context.
- **A news headline:** “President to Announce New Healthcare Plan.” This evokes a frame of politics, government, and policy-making. Even without explicit detail, we infer roles (president, healthcare experts, media), actions (speech, policy drafting, media coverage), and locations (White House, government buildings).
- **A simple sentence: “The window is open.”** Depending on the frame, the meaning could range from a simple description of the room to a warning about burglars or a suggestion to let some fresh air in.

Discussion

Semantic concepts and frames are not just abstract linguistic constructs, they are integral to how we think and communicate. They allow us to navigate complex situations, understand nuanced meaning, and make rapid inferences. Understanding them helps us appreciate the intricate nature of language and the cognitive processes that underly communication.

This framework also reveals potential points of misunderstanding. When our frames or concepts don't align with those of our communication partners, miscommunication can occur. For example, someone from a culture with a different *wedding frame* might have different expectations about the customs of a wedding. This is why cross-cultural communication can sometimes be challenging.

Conclusion

By exploring semantic concepts and frames, we gain a deeper insight into the mechanisms behind our cognitive abilities. These two concepts reveal how our minds organize and interpret the world around us, making it possible to communicate with remarkable efficiency and nuance. They demonstrate that language is more than just words; it's a powerful tool that reflects the complex structures of our minds. As we continue to unravel the mysteries of language, understanding these fundamental aspects of semantics will be essential for a better appreciation of the human experience.

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ASSESSMENT OF THE EFFECTIVENESS OF MARKETING ACTIVITIES OF GENERAL SECONDARY EDUCATIONAL INSTITUTIONS

Abstract: *This article discusses issues such as evaluating the effectiveness of marketing activities in the public education system, namely, the development of a marketing management concept, justification of the effectiveness of its application and implementation in practice. Proposals and recommendations were also developed to identify and evaluate the main indicators of marketing management in the activities of general secondary education institutions.*

Keywords: *general secondary education, marketing, marketing activities, marketing service, quality of Education, Evaluation Criteria, management, management efficiency.*

Introduction. It is known that at the current stage of development of education in the world, great attention is paid to organizational coordination and strategic development of educational institutions in economically developed countries. Especially in modern conditions, it is necessary to take into account the capabilities and needs of the individual more than ever in the education system. This need creates an increasing need for competitive and qualified leaders in the general secondary education system, who can fully meet the requirements of the time, and the need to constantly improve their management competencies. Based on this, international experiences create the need to introduce effective management mechanisms in the general secondary education system through the introduction of marketing services.

The leading countries of the world are conducting various scientific researches aimed at increasing the competitiveness of educational institutions due to the strategic planning and management of educational services based on the needs and requirements of learners. Based on the modern trends of these studies, special attention is paid to the issues of improving the effectiveness of management activities of management staff by improving marketing services in the management of the general secondary education system.

In particular, ensuring the effectiveness of fundamental changes and reforms implemented in our country to establish the New Uzbekistan and the foundations of the Third Renaissance depends on the introduction of effective mechanisms for managing the public education system[22]. In the current period, the regular and stable development of the economy of our republic requires the transition to the stage of systematic organic development based on increasing the innovative activity of

[22] Decree of the President of the Republic of Uzbekistan dated September 5, 2018 No. PF-5538 «On additional measures to improve the public education management system»

economic entities. This process is reflected in the indicators of changes in the educational structure of the economy, and in the conditions of market relations, there is an objective need to restructure the provision of services in the field of education. Accordingly, "... to introduce an effective mechanism for targeted training of young people, their selection from the school period, and subsequent admission to higher educational institutions. It is aimed at the implementation of such important tasks as introducing completely new approaches to the educational process in the public education system."[23] These tasks require implementation of marketing services in school education, improvement of organizational and management mechanisms in general secondary education.

Regarding the relevance of the issue, it is worth noting that the development of the concept of marketing management of general secondary educational institutions, its application and substantiating the effectiveness of its implementation are among the tasks of our scientific research. A comprehensive evaluation of the marketing of general secondary education institutions is desirable. At this point, it should be mentioned that the optimal use of the potential of existing resources is the least developed direction of research in terms of theoretical and practical aspects.

Literature review.

Recently, state and foreign researchers-scientists have consistently been developing mechanisms for improving the management efficiency of the educational system's management personnel and introducing marketing services in educational institutions in one way or another.

In particular, foreign scientists such as P.Drucker, M.Gordon, J.R.Evans, H.Fayol, R.Kaplan, Ph.Kotler, G.Lettau, R.Nelson, R.Thompson, W.Sarges, S.Winter of marketing services have studied organizational-methodological approaches, theoretical and practical aspects in depth and developed scientific-methodological foundations. J. Burnett, E. Dichtl, J. Egan, B. Gardner, E. Grafton, M. Kinnell, C. Lovelock, J. Lambin, J. McDougal, E. D. McGarry, S. Moriarty, P. Morris, M. E The scientific researches of scientists like Porter reflect the scientific-theoretical and methodological aspects of marketing strategy and increasing the competitiveness of economic entities.

In the researches of foreign scientists, it was found that the issues of organization of marketing services in secondary schools have not been sufficiently studied by researching on the scale of the enterprise or firm in the production of marketing strategy.

The following scientists conducted research on the theory, methodology, characteristics of marketing services in the Commonwealth of Independent States (CIS) and marketing services in education, the concept and laws of educational services marketing: P.M. Aminov, I.V. Andreeva, G.L. Bagieva, G. Balykhin, S.A.

[23] President of the Republic of Uzbekistan Shavkat Mirziyoyev's speech at the video conference dedicated to "Development of the public education system, raising the qualifications and influence of pedagogues in society, raising the morale of the young generation" Statement of the Administration of the President of the Republic of Uzbekistan No. 34, August 23, 2019.

Belyakov, I.N. Berezina, Yu.P. Berezutskaya, L.I. Boyko, V.M. Demina, V.M. Zaborova, I.V. Zakharova, I.N. Ivanova, I.F. Isaev, N.P. Kapustin, A.V. Kurbatova, E.E. Lagutina, V.S. Lazarev, N.P. Litvinova, O.O. Martynenko, A.A. Meshkov, B.V. Musatov, A.M. Novikova, I.K. Romanova, A. P. Pankrukhin, F. K. Peregudova, O. V. Saginova, V. A. Slastenin, B. A. Solovev, P. I. Tretyakov, E. N. Shiyanov, L. Y. Shemyatikhina and others.

The research of these scientists is mainly aimed at finding extra-budgetary funds, taking into account higher and professional education. However, based on the requirements of the labor market, the future plans and chosen professions of students, marketing is not considered a process at the level of the management of a general education institution.

The following scientists from our country dealt with the issues of management of education system marketing and its improvement, and significant results were achieved during the research work: A.Kh.Abdullaev [3], K.M.Almakuchukov [4], G.Akhunova [5], D.Nazarova [7], D. Nabiev [8], A. O. Ochilov [9], N. S. Rahimov [3], M. O. Khadaev [3] and others.

For example, A. Kh. Abdullaev, N. S. Rahimov, M. O. Khadaev, the quality of educational services does not directly depend on the conditions (use of modern education and training technologies, availability of highly qualified teachers) of their production, but on the individual mental abilities of the children admitted to the educational institution, enthusiasm, the content and style of studies, the level of preparation of the teacher, and they even explain that it is due to its instability depending on the school schedule and the season of the year [3].

The scientists of our country mainly thought about educational management and studied the theoretical and methodological aspects of marketing. However, we found that the issues of organization and management of marketing services in secondary education, the role and importance of managers in it have not been fully researched.

The analysis of existing research shows that the issues of improving the mechanism of organizing marketing services in increasing the efficiency of the management of the general secondary education system, as well as determining the efficiency indicators of the results of management activities based on the principles of marketing, are not sufficiently researched.

Analysis and results. In the conditions of market competition, special attention must be paid to the organization of marketing services that ensure the effective development of production and service industries. Marketing is an advanced form of effective management in the conditions of market relations, and attention is being paid as an important factor of increasing the competitiveness of the economy. It is somewhat difficult to build a competitive country, create a network, and a product without forming a competitive economy. This, in turn, requires the formation of a marketing system in various branches and sectors of the economy and the need to conduct marketing research with a comprehensive and deep scientific basis in order to further develop their activities.

The process of establishing a marketing service in education involves turning plans into realistic marketing action programs. In addition, the process of organizing a marketing service involves the creation of an appropriate organizational structure (holding events, informing the public, preparing and placing information on the site, external design, interaction with parents, etc.), the distribution of functional tasks, the determination of the number of people who perform marketing activities, their motivation, training, and the criteria for evaluating their activities [6].

In order to ensure the effectiveness of marketing services in education, the public education system requires a systematic study and analysis of the effectiveness of educational quality and the competitiveness of educational institutions before and after the organization of marketing services of the structural units in the system. It is important to develop a “model” of the process of studying this problem, and it is urgent to carry out an analysis of management activities after the organization of marketing services of the public education system.

Based on the analysis of the results of the marketing service, we determined the main quality indicators for evaluating the effectiveness of the marketing service of the general secondary education institution. They included indicators such as the quality of education and the increase in the competitiveness of the school, the weight of the graduates entering the Higher Education Institution (Table 1).

Table 1

The main quality indicators for evaluating the effectiveness of the marketing service of a general educational institution

Directions	Indicators
Quality of education	- The number of pedagogic personnel who trained students who won in science Olympiads and examinations of international scale; - the number of pedagogic personnel who trained the students who won the republic-wide science olympiads and examinations; - the number of pedagogic personnel who trained the students who won in regional science Olympiads and examinations; - the number of pedagogic personnel who trained students who won the district (city) science Olympiads and examinations;
Economical	- availability of fixed assets; - availability of tools; - level of information; - availability of library funds; - provision of sports facilities.
Institutional competitiveness	- national rating; - district (city) level rating; - level of social activity of the educational institution;
Number of graduates entering higher education institutions	- up to 5% of the total number of graduates; - 5-20% of the total number of graduates; - 20-50% of the total number of graduates; - more than 50% of the total number of graduates;
Work with personnel	- the number of teaching staff awarded with state awards of the Republic of Uzbekistan; - Winners of the "Ustoz" national award; - the number of specialists with a master's degree;

	- the number of pedagogues with the degree of candidate of science, doctor of philosophy; - the number of high-class teachers; - the number of first-class teachers

Based on this, there are differences in the evaluation of marketing activities in each educational institution, which are related to the following aspects:

- the leader realizes the need to implement marketing in the general structure of management to ensure the quality of education and the competitiveness of the educational institution;
- availability of qualified personnel capable of providing marketing services based on the requirements of labor and educational services;
- conducting marketing research and based on its results, setting the strategic goal of the educational institution, developing prospective plans, and fulfilling the tasks set to achieve it on time and with quality;
- the level of provision of resources necessary to implement effective management and achieve final performance indicators and increase competitiveness.

In the course of the research, we determined the effectiveness of the marketing service in the public education system by analyzing the quality of education and the stability of the institution's competitiveness. Based on this, we used the coefficient of the stability of the quality of education and the competitiveness of the institution based on the proposed indicators to evaluate the effectiveness of the marketing service:

$$K_b = N/N*100\%_{tot},$$

Here:

K_b – coefficient of stability of development of the quality of education and the competitiveness of the institution according to the indicator selected during the research period;

N – the number of positive changes of the indicator proposed for evaluating the effectiveness of the marketing service;

N_{tot} – the total number of indicator changes proposed to evaluate the effectiveness of the marketing service, as well as when the change is equal to "0".

Since the proposed indicators have different results (actual results of educational institution activity, generalization of team and experts' evaluations), we combine using the integral indicator calculation:

$$K_{bu} = (\Sigma\ _{Yi} \text{ x } K_{bi}) /n,$$

Here:

K_{bu} – cumulative integral indicator of educational institution development stability;

Yi – the weight of the i-criterion in the evaluation of marketing activity for the indicators proposed to evaluate the effectiveness of the marketing service;

K_{bi} – the coefficient of indicators of the quality of education and the stability of the institution's development, calculated on the basis of the indicators proposed to evaluate the effectiveness of the marketing service;

n– number of coefficients.

The proposed methodological approach was approved on the example of a number of secondary schools of Tashkent city, Fergana and Tashkent regions, and the following indicators were achieved (Table 2).

Table 2

The dynamics of changes in the main quality indicators for evaluating the effectiveness of marketing activities

Criteria	Indicator	2021 year			2024 year		
		Tashkent region	Fergana region	Tashkent city	Tashkent region	Fergana region	Tashkent city
Educational	the number of pedagogic personnel who have trained students who have won in international science Olympiads and examinations;	12	14	34	15	17	37
	the number of pedagogic personnel who have trained students who have won the republic-wide science Olympiads and examinations;	1	3	3	1	5	5
	the number of pedagogic personnel who trained students who won in the science Olympiads and examinations of the region;	2	6	8	2	7	12
	the number of pedagogic personnel who trained students who won the district (city) science Olympiads and examinations;	4	8	18	5	7	21
	national rating;	13	6	10	12	7	3
	level of social activity of the educational institution, %;	17	44	52	17	44	52
Economical	availability of fixed assets, %;	17	22	23	17	22	23

	availability of means, %;	32	42	48	32	42	48
	information level, %;	38	52	83	38	66	92
	availability of library funds;	+	+	+	+	+	+
	provision of sports facilities.	+	+	+	+	+	+
Personnel	Number of pedagogues awarded with state awards of the Republic of Uzbekistan;	-	2	8	1	3	12
	Winners of the national award "Ustoz";	-	2	1	-	2	1
	the number of high-class teachers;	8	12	12	14	18	22
	the number of first-class teachers;	18	14	22	20	18	28
	staff stability, %;	88	87	66	88	88	68
Graduates	share of excellent certificates, %;	8	14	12	10	18	17
	share of graduates entering HEIs, %;	15	16	26	17	42	66
	a member of the political, economic, cultural elite of the region;	-	+	+	-	+	+
	level of knowledge of foreign languages and information technologies, %.	14	32	44	17	38	52

The comparative dynamic series based on the results of the marketing services of general secondary schools is proposed to determine the impact of each indicator on the final result and the main trends of changes in the effectiveness of marketing services, as well as to determine the competitive advantages of the institution, to make changes to marketing services based on the requirements of the educational services market, and to maintain competitiveness. by predicting the achievement of future goals, it allows for the purposeful formation of future plans of the general secondary school.

Thus, marketing activities are aimed at increasing the efficiency of the general secondary education institution's management activities and forming competitive advantages, allowing to balance and harmonize the interests of consumers of educational services and society in general, developing and providing educational services that meet the needs of consumers, as well as their social significance. that it allowed to develop educational needs can be justified by the fact that as a result of the conducted research, the effectiveness of the school leaders' management activity increased by 22%.

The analysis of the efficiency of the marketing service organized in general education institutions of Tashkent city, Fergana and Tashkent regions showed that there is a trend of stable growth in the quality of education and the competitiveness of the institution.

Conclusions and suggestions

Based on the analysis of the received data, recommendations for the development and improvement of the marketing management of the general secondary educational institution were developed.

One of the main issues of evaluating the effectiveness of marketing management is to determine the place and role of marketing activities in the organizational structure of the public education system, including the list of activities, their completeness and complexity.

Accordingly, we evaluate the effectiveness of the organization of marketing management with the sum of the following indicators:

- researching the market of labor and educational services in order to carry out effective activities of the marketing service;
- study of competitors;
- management of the educational process;
- creation and organization of educational services and programs of new content;
- promotion of educational services and provision of quality education;
- development of marketing strategy;
- integration of marketing service into public education management system;
- ensuring the interaction of the marketing service with the organizations and institutions of the public education system;
- analysis of the results of the marketing service, making corrections based on the analysis.

An objective assessment of the organization of marketing management in the general secondary education system allows to determine the position of the marketing department within the relevant ministry and the level of its business activity.

The obtained results made it possible to quantitatively justify the effectiveness of the marketing service organized in general secondary educational institutions and to evaluate the effectiveness of the marketing service of the general secondary educational institution by determining the level of activity of the marketing service.

In order to evaluate the effectiveness of marketing service activity among competing educational institutions in the market of educational services, we process the obtained values through the ratio of selected criteria. A positive level >1, which ensures the effectiveness of the marketing service of educational institutions, and a negative level <1 corresponds to the opposite value. Also, if the values are equal, there may be an intermediate option.

The analysis of the marketing service of the general secondary education institution shows that its organization and development are related to the continuous analysis of the needs and expectations of the main consumer groups, the development and presentation of the educational services required by them, including such components as content, technology and service components. . This, in turn, allows to increase the efficiency of the institution, to form its competitive advantages, to achieve the goal through the effective management of the provision of educational services, to study the needs of consumers, to allocate resources and to fully satisfy the needs of selected segments compared to competitors by choosing a target market.

Thus, in the research, the marketing service is defined as a general education institution that aims to increase the efficiency of the institution's activities and form competitive advantages, allows balancing and harmonizing the interests of society, and is carried out by developing and providing educational services that meet the needs of consumers.

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INGLIZ VA O‘ZBEK TILLARIDA ATOQLI VA TURDOSH OTLI TEZ AYTISHLARNING QIYOSIY TAHLILI

Annotatsiya *Ushbu maqolada ingliz va o‘zbek tillaridagi atoqli va turdosh otlar ishtirokidagi tez aytishlarning tilshunoslik va madaniy ahamiyati o‘rganiladi. Tez aytishlarning tuzilishi, ma’nosi va qo‘llanilishi qiyosiy tahlil qilinib, ularning o‘xshash va farqli jihatlari aniqlanadi. Tadqiqot sifat jihatdan tahlil metodologiyasiga asoslanib, lingvistik korpus va etnolinguistik manbalardan foydalanadi. Natijalar shuni ko‘rsatadiki, har ikkala tilda tez aytishlar asosan talaffuz qiyinchiliklari va o‘yin elementlarini o‘zida aks ettirsa*-da, *ularning madaniy xususiyatlari sezilarli darajada farqlanadi.*

Kalit so‘zlar: *Ingliz tili, o‘zbek tili, tez aytishlar, atoqli otlar, turdosh otlar, qiyosiy tahlil, talaffuz qiyinchiliklari, lingvistik xususiyatlar, madaniy xususiyatlar, semantik murakkablik, o‘yin elementlari, xalq og‘zaki ijodi, etnolinguistika.*

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COMPARATIVE ANALYSIS OF QUICK STATEMENTS WITH NOUNS IN ENGLISH AND UZBEKISTAN

Annotation. *This article studies the linguistic and cultural significance of quick states with nouns in English and Uzbek. The structure, meaning and use of quick states are analyzed comparatively, and their similarities and differences are identified. The study is based on a qualitative analysis methodology, using linguistic corpus and ethno linguistic sources. The results show that, although quick states in both languages mainly reflect pronunciation difficulties and game elements, their cultural characteristics differ significantly.*

Keywords: *English, Uzbek, quick sayings, proper nouns, cognate nouns, comparative analysis, pronunciation difficulties, linguistic features, cultural features, semantic complexity, game elements, folk oral art, ethno linguistics.*

Kirish. Tez aytishlar tilning o‘ziga xos qismi bo‘lib, nutq ravonligini oshirish va tilning talaffuz imkoniyatlarini namoyish etish uchun ishlatiladi. Ingliz va o‘zbek tillarida tez aytishlar ko‘pincha atoqli va turdosh otlarni o‘z ichiga oladi, bu esa ularning semantik va fonetik murakkabligini oshiradi. Ushbu tadqiqot ingliz va o‘zbek tillaridagi tez aytishlarning lingvistik va madaniy jihatlarini qiyoslashni maqsad qilgan.

Tadqiqotning asosiy maqsadlari quyidagilardan iborat:

1. Ingliz va o‘zbek tillaridagi tez aytishlarning lingvistik xususiyatlarini tahlil qilish.
2. Tez aytishlarda atoqli va turdosh otlarning semantik va fonetik rolini aniqlash.
3. Ushbu tez aytishlarning madaniy va ijtimoiy ahamiyatini o‘rganish.

Metodologiya. Ushbu tadqiqot sifat jihatdan qiyosiy tahlil metodologiyasiga asoslangan. Ingliz va o‘zbek tillaridagi tez aytishlar maxsus lug‘atlar, adabiy manbalar va xalq ijodi namunalaridan to‘plandi. Ma’lumotlar quyidagi mezonlarga asosan saralandi:

- Tez aytishda atoqli va turdosh otlarning mavjudligi.
- Talaffuz va semantik murakkablik darajasi.

Tahlil davomida tez aytishlar mavzular, talaffuz qiyinchiliklari va o‘yin elementlari bo‘yicha tasniflandi. Qiyosiy tahlil usuli yordamida ingliz va o‘zbek tillaridagi o‘xshashliklar va farqlar aniqlab chiqildi.

Natijalar. Tahlil natijalari tez aytishlarning universal va madaniy xususiyatlarini ko‘rsatdi:

1. **Universallik jihatlari:**

Har ikkala tilda tez aytishlar talaffuz qiyinchiliklari orqali o‘yin elementlarini yaratishga xizmat qiladi. Masalan:

- Ingliz tilida: *"She sells seashells by the seashore."*
- O‘zbek tilida: *"Qo‘r’a-qo‘r’a qora qarg‘alar qiyqiradi."*

Atoqli otlarning qo‘llanilishi, masalan, shaxs yoki joy nomlari, tez aytishlarga semantik chuqurlik qo‘shadi. Misol:

- Ingliz tilida: *"Betty Botter bought some butter."*
- O‘zbek tilida: *"Bozorning boz qoplari buzilmas."*

2. **Madaniy xususiyatlar:**

Ingliz tez aytishlarida ko‘pincha individualizm va hazilomuz ma’nolar aks etsa, o‘zbek tez aytishlari ko‘proq jamoaviylik va etnografik unsurlarni o‘z ichiga oladi.

- Ingliz tilida: *"Peter Piper picked a peck of pickled peppers."*
- O‘zbek tilida: *"Qozi qozonda qazi qovurdi."*

O‘zbek tilidagi tez aytishlarda milliy hayot tarziga oid unsurlar, masalan, qishloq xo‘jaligi va tabiat tasvirlari ko‘p uchraydi. Misol:

- *"Choy ichadigan cho‘mich chiqdi."*

Misollarni qiyosiy tahlili:

- Inglizcha tez aytish: *"How can a clam cram in a clean cream can?"*

Talaffuzdagi murakkab tovushlar: "cl" va "cr" kombinatsiyasi.

- O‘zbekcha tez aytish: *"Sayyod sayhon sayilgohda sayr qildi."*

So‘z boshi tovushlarining takrori: "say" va "s" harfi.

Munozara. Natijalar shuni ko‘rsatadiki, tez aytishlar fonetik murakkablik bilan birga, til va madaniyat o‘rtasidagi chuqur bog‘liqlikni ham namoyon etadi. Ingliz va o‘zbek tillaridagi tez aytishlarning farqlari ularning tarixiy va ijtimoiy sharoitlari bilan izohlanadi. Ingliz tilidagi tez aytishlarda globalizm va ko‘p millatlilik unsurlari kuzatilsa, o‘zbek tez aytishlari mahalliy madaniy qadriyatlarni aks ettiradi. Bundan tashqari, o‘zbek tilidagi tez aytishlar sheva va xalq og‘zaki ijodi bilan boyitilgan.

Xulosa. Ushbu maqolada ingliz va o‘zbek tillaridagi atoqli va turdosh otli tez aytishlarning lingvistik va madaniy jihatlari qiyosiy tahlil qilindi. Natijalar shuni ko‘rsatadiki, tez aytishlar universallik bilan bir qatorda o‘ziga xos madaniy xususiyatlarga ham ega. Kelgusidagi tadqiqotlar boshqa tillardagi tez aytishlarni ham qamrab olib, bu jarayonni yanada kengroq o‘rganishga yordam berishi mumkin.

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THEORETICAL BASIS OF ASSESSING THE FINANCIAL AND ECONOMIC EFFICIENCY OF INDUSTRIAL ENTERPRISES

Annotation. *This article describes the theoretical bases, indicators, and principles of statistical evaluation of the financial and economic efficiency of industrial enterprises. In particular, the grouping of general principles of investment efficiency assessment, methods of financial and economic efficiency assessment of investment projects, methodological development stages of economic assessment of financial and investment components of industrial potential are presented in detail. Author approaches to statistical evaluation of financial and economic efficiency of industrial enterprises have also been developed.*

Key words: *industry, industrial enterprises, statistical assessment, industrial potential, efficiency, financial and economic efficiency.*

Introduction

According to the UNCTAD report, the investment gap in developing countries to achieve the Sustainable Development Goals (SDGs) by 2030 may widen. After all, global foreign direct investment (FDI) was observed to decrease by 12 percent in 2022. However, the volume of investment in industrial projects has increased. In particular, the volume of direct investment abroad of the United States increased from 6.37 trillion dollars at the end of 2021 to 6.58 trillion dollars at the end of 2022. The largest increase in investment projects in industry was recorded by the Netherlands and the United Kingdom ($ 172.8 billion).

It is known from world experience that the rapid development of the economy improves the investment climate. Investors invest in various projects or enterprises and receive income depending on the level of profitability of the project or enterprise. In this case, factors such as the profitability of enterprises and the time spent on covering costs are in the focus of investors. Therefore, it is important to assess the financial and economic efficiency of the project before investing.

In Uzbekistan, in recent years, one of the pressing issues has been the implementation of investment programs in the system of management of strategic goals and projects of industrial development, their support, improvement of the mechanism for managing investment activities, especially increasing the financial and economic efficiency of investment projects implemented in industrial enterprises.

In the current conditions of economic development, the development and expansion of production and investment relations are observed. Of course, in financing investment projects implemented in industrial enterprises aimed at ensuring sustainable economic development, intensive production of competitive products and, most importantly, obtaining high profits, the share of internal (in the form of own funds, budget funds, bank loans, borrowed funds, domestic investor funds) and external (foreign investor funds, external debts, foreign bank loan funds and other forms) investments is increasing. All this indicates the relevance of the topic of this study.

Literature review

In recent years, the problem of increasing investment efficiency in the implementation of various types of projects has become particularly relevant. The essence of the problem of increasing investment efficiency is to achieve a significant increase in the volume of production, service provision and each unit of expenditure - labor, material, financial profit. Solving the problems of increasing the efficiency of investment activities of industrial enterprises largely depends on the correctly chosen strategy for their development and management [1].

First of all, it is advisable to deeply understand the essence of such concepts as industry, industrial enterprises, investment project and its financial and economic efficiency, as well as to study theoretical views on this issue.

Industry is one of the most dynamic sectors of the world economy [2], according to J.Church, R.Ware [3], A.Marshall [4], industry is the basis of material production and is the dominant force in the sustainable operation of all other sectors and industries.

According to the economist A. Ortikov [5], industry is a reflection and a high generalization of objective reality (being). Its emergence as a separate sector, that is, a separate sphere of social production, is historically connected with the development of productive forces and the social division of labor.

Based on the above, it can be said that industry is a sector that produces many products and tools that people want and need, and it develops along with the development of science and technology.

Therefore, industrial enterprises are of great importance for the economy of countries. In addition to being a profitable sector, a large amount of capital (investment) is required for the establishment and stable operation of enterprises in this sector. Most industrial enterprises are no exception, since investment is the main means of modernizing the existing material and technical base, increasing production volumes, or diversifying existing activities into new types. On the other hand, it is important for investors that the investment projects being implemented are effective. Therefore, it is always relevant to assess the effectiveness of investments. Also, when making investment decisions, factors such as the type of investment, the cost of the investment project, and its size should be taken into account.

Research methodology

In carrying out this study, official statistical data, statistical observation, comparative analysis, synthesis, logical reasoning, tables and graphs, comparative analysis, statistical analysis, mathematical and econometric modeling methods were widely used. For statistical analysis, official statistical data of the Statistical Agency under the President of the Republic of Uzbekistan and international organizations were used.

Analysis and results

Investment efficiency assessment is the most important stage of making an investment decision, the results of which largely determine the level of implementation of the investment goal. In turn, the objectivity and reliability of the results obtained are largely determined by the analytical methods used. In this regard, it is important to consider existing methodological approaches to assessing the effectiveness of investments and identify the possibilities of their application for a rational selection of investment opportunities.

Investments are the receipt of profit (income) through investments in cash, target bank deposits, shares, stocks and other securities, technologies, machinery, equipment, licenses, including trademarks, loans, other property or property rights, intellectual property, entrepreneurship and other types of activity [6].

Investment efficiency is understood as the ratio between the effective results obtained as a result of an enterprise's investments and the volume of consumed or produced output, that is, the proportional relationship between the income and expenses of the enterprise's investment activities, the output produced and the costs incurred. Investment efficiency is a measure of how effectively an enterprise allocates limited resources to investment projects and converts investment opportunities into actual investment [7].

An investment project involves planning three main cash flows over time: investment flows, current (operating) payment flows, and income flows. It is impossible to accurately plan both current payment flows and income flows, since it is impossible to accurately predict the future state of the market. Also, the price and volume of products sold, prices for raw materials and supplies, and other environmental cost indicators may differ significantly from the planned values, estimated from today's point of view, in their future implementation [8].

International practice for assessing the effectiveness of investments is based mainly on the concept of the time value of money and the following principles [9]:

1. The efficiency of using investment capital is assessed by comparing the cash flows generated during the implementation of the investment project with the initial investments. The project is considered effective if it provides a return on the initial investment amount and the necessary income for investors who provided the capital.

2. Invested capital, as well as cash flows, are reduced to the present time or a specific reporting year (usually before the start of the project).

3. The process of discounting capital investments and cash flows is carried out at different discount rates, which are determined depending on the characteristics of investment projects. When determining the discount rate, the composition of investments and the value of individual components of capital are taken into account.

Despite the significant differences between different types of projects and the variety of conditions for their implementation, the assessment of the effectiveness of projects and their examination should be carried out in a certain sense in the same way. Therefore, the assessment of the effectiveness of any type of project, regardless of its technical, technological, financial, industrial or regional characteristics, is based on common basic rules (principles).

Such principles can be divided into three groups and their composition can be summarized as follows: methodological, methodical and operational.

Table 1

Grouping of general principles for assessing investment performance [11]

General principles of assessing investment efficiency		
Methodological:	**Method:**	**Operational:**
Social acceptability; Systematicity; Complexity; Adequacy; Payment for resources; Non-negativity and maximum impact; Comparability; Utility; The presence of various project participants and the coordination of their interests.	Comparison of situations "with" and "without" the project; Uniqueness; Measurability; Suboptimization; Dynamism; Time value of money; Incomplete information; Capital structure.	Interdependence of parameters; Modeling; Organizational and economic mechanism of project implementation; Multi-stage assessment; Information usefulness; Adaptation to public policy; Information consistency; Methodological consistency; Overall assessment.

Financial and economic assessment of an investment project occupies a central place in the process of selecting and justifying possible options for investing funds in various operations (objects) with real assets. Financial analysis reveals the potential of each of its participants to achieve the results that can be achieved in the implementation of the project, based on their own goals. Economic analysis analyzes the project from the perspective of its impact on the national economy. In particular, World Bank employees (experts) have carried out extensive analytical work to determine whether each project is more effective in the economy than other conflicting options for investing specific resources.

The main criterion for selecting investment projects by the World Bank is the discounted expected value of the benefit minus the costs. Of course, both income and costs increase during the implementation of the project. In order for the project to pass the economic selection, it must meet the following two conditions:

- the net present value of the expected benefit from the implementation of the project must not be negative;

- the expected net value of the project must be equal to or higher than the expected net value of other alternative projects.

Financial assessment is used to analyze the liquidity of an investment project in the process of implementation. In other words, the task of financial assessment is to determine whether the enterprise has sufficient financial resources to fulfill its total financial obligations for the implementation of the project within the specified time frame. Economic assessment, on the other hand, is used to assess the potential ability of an investment project to maintain the value of the funds invested in this project and create a sufficient level of their growth rate.

In general, the indicators and procedure for calculating the economic efficiency of capital investments are established in the Model Methodology for Determining the Social Efficiency of Capital Investments.

According to this model methodology, the efficiency of capital investments is determined at all stages of planning. That is, efficiency in the design of facilities is determined by two types of indicators (coefficients) - the overall (absolute) economic efficiency of capital investments and the relative economic efficiency. In other words, the overall economic efficiency is relative and is determined by the ratio of the effect to the costs necessary to obtain it.

Conclusions

In practice, the assessment of the effectiveness of investment projects is carried out on the basis of financial and economic methods. That is, the methods for assessing the financial and economic effectiveness of investment projects include the following (Figure 1).

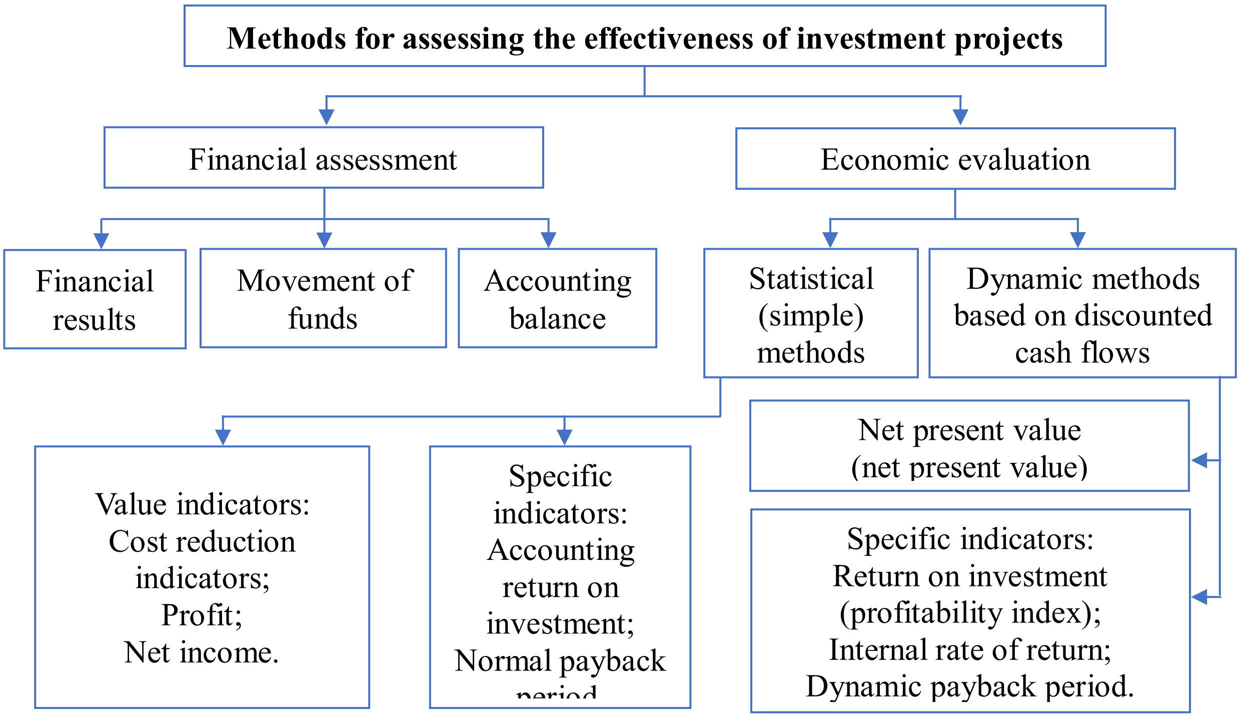

Figure 1. Methods for assessing the financial and economic efficiency of investment projects[24]

In particular, for investment projects, the value of the project should be assessed by comparing future revenues and costs. The net present value criterion NPV is used in investment evaluation.

According to this criterion, an investment is made if the income generated is higher than the cost of the investment ($R > C$).

[24] Compiled by the author based on a summary of scientific sources.

$$NPV = -I + \frac{R_1 - C_1}{(1+i)} + \frac{R_2 - C_2}{(1+i)^2} + ... + \frac{R_T - C_T}{(1+i)^T}$$

where: i - discount rate (rate of simultaneous costing);

T - project life.

If NPV>0, the investment is justified, that is, the expected benefit is greater than the cost of the investment. If NPV<0, the investment is not justified.

When the project life is infinite (t→∞), the net present value is calculated as follows.

$$NPV = -I + \frac{R - C}{i}$$

The stages of methodological development of the economic assessment of the financial and investment components of industrial potential are as follows:

Stage 1. Determining the purpose of assessing the financial and investment components of industrial potential, i.e., making effective decisions in the field of implementing state control over the development of the financial and investment components of industrial potential;

Stage 2. Determining the development indicators of the financial and investment components of industrial potential, i.e., developing initial indicators to reflect potential opportunities and final indicators to characterize the potential;

Stage 3. Determining the system of indicators for assessing the financial and investment components, i.e., a set of interrelated indicators reflecting the quantitative and qualitative development indicators of the financial and investment components of industrial potential;

Stage 4. Grouping of assessment indicators by financial and investment components of industrial potential, i.e., selection of indicators by initial and production development parameters for financial and investment components of industrial potential;

Stage 5. Determination of the methodology for assessing the financial and investment components of industrial potential, i.e., calculation of integral indicators of the level of development of the financial and investment components of industrial potential based on reliable statistical data.

In general, since it is impossible to quantify all indicators, it is necessary to resort to a balanced scorecard, which provides for the integration of financial and non-financial indicators. The balanced scorecard includes four strategic zones that reflect the relevant prospects of the company. In particular, it is advisable to assess the financial outlook, customer value, the outlook for internal business processes, innovation, and economic growth.

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GEOSIYOSIY NAZARIYA VA QARASHLAR, GEOSIYOSIY MAKTABLAR TARIXINING TAHLILI

Annotatsiya: *Geosiyosat – geografiya va siyosatning o'zaro aloqasini tahlil qiluvchi muhim fan sohasidir. U davlatlarning geografik joylashuvi, resurslari va strategik pozitsiyalari asosida xalqaro munosabatlarni shakllantirish jarayonini o'rganadi. Geosiyosiy nazariya va qarashlar tarixiy jarayonlar davomida rivojlanib, bugungi kunda ham global siyosatda muhim o'rinni egallaydi. Ushbu maqolada geosiyosiy nazariyalar, ular asosida shakllangan maktablar va ularning rivojlanish jarayonlari tahlil qilinadi*

Kalit so‘zlar: *geosiyosat, geosiyosiy nazariyalar, geosiyosiy maktablar tarixi, texnologik raqobat, mintaqaviy integratsiya*

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GEOSOCIAL THEORY AND VIEWS, ANALYSIS OF THE HISTORY OF GEOSOCIAL SCHOOLS

Annotation: *Geopolitics is an important branch of science that analyzes the relationship between geography and politics. It studies the process of forming international relations based on the geographical location, resources, and strategic positions of states. Geopolitical theories and views have developed throughout historical processes and still occupy an important place in global politics today. This article analyzes geopolitical theories, the schools formed on their basis, and the processes of their development.*

Key words: *geopolitics, geopolitical theories, history of geopolitical schools, technological competition, regional integration*

Geosiyosiy nazariyalar va ularning asoschilari

Geosiyosiy nazariyalar xalqaro munosabatlarni tushunishda muhim rol o'ynaydi. Quyida asosiy nazariyalar va ularning asoschilari tahlil qilinadi:

Heartland nazariyasi (H. Makinder):

- H. Makinderning 1904-yilda ilgari surgan “Heartland” nazariyasi geosiyosiy fikrlashning asosiy g'oyalaridan biri hisoblanadi.
- Ushbu nazariyada Yevroosiyo qit‘asining markaziy qismi (Heartland) global hokimiyat uchun hal qiluvchi ahamiyatga ega deb hisoblanadi.

Rimland nazariyasi (N. Spaykman):

- N. Spaykman “Heartland” nazariyasini rivojlantirib, dengizga yaqin hududlar (Rimland) dunyo siyosatida asosiy rol o'ynashini ta‘kidladi.

- Rimland hududlari, xususan, Yevropa, Yaqin Sharq va Osiyoning qirg'oqbo'yi zonalari strategik ahamiyatga ega.

Mintaqaviy nazariya (K. Haushofer):

- Karl Haushofer tomonidan ishlab chiqilgan mintaqaviy nazariya davlatlarning siyosiy va iqtisodiy kuchini mintaqaviy ko'lamda tahlil qilishga qaratilgan.
- Ushbu nazariya Germaniya geosiyosiy maktabining shakllanishiga katta ta‘sir ko'rsatgan[1].

Global geosiyosiy tahlil (Z. Bjezinskiy):

- Zbignev Bjezinskiy geosiyosatni sovuq urush sharoitida xalqaro munosabatlarning asosiy harakatlantiruvchi kuchi sifatida talqin qildi.
- Uning “Katta shaxmat taxtasi” kitobi global kuchlar balansini tahlil qilishga bag'ishlangan.

Geosiyosiy maktablar tarixi

Geosiyosiy maktablar tarixiy jarayonlarda shakllanib, davlatlarning xalqaro siyosatdagi strategiyalarini belgilashda muhim rol o'ynagan. Quyida asosiy maktablarning rivojlanish tarixi keltiriladi:

Germaniya geosiyosiy maktabi:

- Ushbu maktab Karl Haushofer boshchiligida shakllangan va mintaqaviy kuchlarning o'zaro ta‘sirini o'rganishga asoslangan.
- Haushoferning qarashlari Ikkinchi Jahon urushi davrida Germaniya tashqi siyosatiga katta ta‘sir ko'rsatgan[2].

Anglo-Amerika geosiyosiy maktabi:

- H. Makinder va N. Spaykman ushbu maktabning asoschilari hisoblanadi.
- Ushbu maktab dengiz va quruqlik kuchlari o'rtasidagi muvozanatni tahlil qilishga qaratilgan.

Rossiya geosiyosiy maktabi:

- Rossiya geosiyosatida E. Trubetskoy va A. Dugin kabi olimlar muhim rol o'ynagan.
- Ushbu maktab Yevroosiyo nazariyasini rivojlantirib, Rossiyaning geosiyosiy ta‘sirini kengaytirishga qaratilgan.

Fransiya geosiyosiy maktabi:

- Vidal de la Blash va uning izdoshlari geografik omillarni tahlil qilish orqali xalqaro siyosiy jarayonlarga ta‘sir qilishga harakat qilishgan.
- Ushbu maktab geografik determinizm tamoyillarini rivojlantirgan.

Geosiyosiy nazariyalar rivojlanishining tahlili

Geosiyosiy nazariyalar rivojlanishi global siyosatdagi o'zgarishlarga bog'liq holda shakllangan. Quyida ushbu rivojlanish bosqichlari tahlil qilinadi:

19-asr:

- Geografiya va siyosat o'rtasidagi bog'liqlik ilk bor 19-asrda tizimli tahlil qilina boshladi.
- Ushbu davrda G. Retzel va F. Ratzel kabi olimlar geosiyosatning nazariy asoslarini yaratgan.

20-asr boshi:

- H. Makinderning “Heartland” nazariyasi va K. Haushoferning mintaqaviy yondashuvi geosiyosatni yangi bosqichga olib chiqdi.
- Bu davrda davlatlarning resurslar uchun kurashi va hududiy ekspansiya siyosati ustuvor bo'lgan.

Sovuq urush davri:

- Sovuq urush geosiyosiy nazariyalar rivojiga yangi yo'nalish berdi.
- Bjezinskiy va Kissinger kabi siyosatchilar geosiyosiy strategiyalarni nazariy jihatdan mustahkamladi[3].

Zamonaviy davr:

- Globalizatsiya va texnologik taraqqiyot geosiyosatning yangi paradigmalarini yuzaga keltirdi.
- Energetik xavfsizlik, kiberxavfsizlik va iqlim o'zgarishi zamonaviy geosiyosiy tahlillar markazida turibdi[4].

Geosiyosiy qarashlarning hozirgi davrdagi ahamiyati

Hozirgi davrda geosiyosiy qarashlar global siyosiy muammolarni hal qilishda muhim ahamiyat kasb etadi. Quyidagi yo'nalishlar bunga misol bo'la oladi:

Energetika geosiyosati: Energiya resurslari uchun kurash xalqaro siyosatning muhim tarkibiy qismi bo'lib qolmoqda.

Texnologik raqobat: Sun‘iy intellekt va axborot texnologiyalari davlatlarning geosiyosiy strategiyasiga ta'sir ko'rsatmoqda.

Mintaqaviy integratsiya: Evropa Ittifoqi, ASEAN va boshqa tashkilotlar mintaqaviy barqarorlikni ta‘minlashda geosiyosiy qarashlarga tayanmoqda.

Xulosa o`rnida geosiyosiy nazariya va qarashlar, geosiyosiy maktablarning tarixi xalqaro siyosiy jarayonlarni tushunishda muhim nazariy va amaliy asosdir. Ushbu nazariyalar rivojlanishi global siyosatning turli davrlaridagi o'zgarishlarni aks ettiradi. Kelajakda ushbu nazariyalarni yanada chuqurroq o'rganish va zamonaviy tahdidlar bilan bog'lash geosiyosiy tahlilning samaradorligini oshiradi[5].

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GEOSIYOSATNING ILMIY VA METODOLOGIK ASOSLARI

Annotatsiya: *Ushbu maqolada Geosiyosat zamonaviy xalqaro munosabatlarning nazariy va amaliy jihatlarini o'rganishda muhim fan sohasi sifatida tahlil qilingan. Ushbu soha dunyo siyosiy haritalarida davlatlarning o'rni, geografik resurslar taqsimoti, va ular orasidagi munosabatlarni tahlil qilishni o'z ichiga oladi. Geosiyosatning ilmiy va metodologik asoslarini o'rganish xalqaro munosabatlarning chuqur tahlilini ta'minlashda muhim rol o'ynaydi.*

Kalit so‘zlar: *geosiyosat, geografik determinizm, geopolitik pozitsiya, strategik resurslar, kartografik yondashuv*

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SCIENTIFIC AND METHODOLOGICAL FOUNDATIONS OF GEOPOLITICS

Annotation: *This article analyzes Geopolitics as an important field of study in the study of theoretical and practical aspects of modern international relations. This field includes the analysis of the position of states on the political maps of the world, the distribution of geographical resources, and the relationships between them. The study of the scientific and methodological foundations of geopolitics plays an important role in providing a deep analysis of international relations.*

Key words: *geopolitics, geographical determinism, geopolitical position, strategic resources, cartographic approach*

Geosiyosatning ilmiy asoslari asosan uch asosiy g'oyaga tayanadi: geografik determinizm, geopolitik pozitsiya va strategik resurslar. Ushbu g'oyalar geosiyosatni nazariy darajada o'rganishda metodologik asos sifatida xizmat qiladi.

Geografik determinizm: Ushbu tamoyil davlatlarning xalqaro siyosiy tizimdagi o'rni va ta'sirini ularning geografik joylashuvi va tabiiy resurslariga bog'liqligini ta'kidlaydi. Masalan, dengizga chiqish imkoniyati bo'lgan davlatlar global savdo va transportda ustunlikka ega bo'ladi[1].

Geopolitik pozitsiya: Davlatlarning strategik joylashuvi, ya'ni ularning chegaralari, qo'shni davlatlar va xalqaro transport yo'llariga nisbatan joylashuvi, global siyosiy jarayonlarga ta'sir ko'rsatadi. Xalford Makinder va Nikolas Spaykman kabi olimlar bu tushunchani rivojlantirishda muhim rol o'ynagan[2].

Strategik resurslar: Geosiyosatda davlatlarning tabiiy resurslar, energiya zaxiralari va texnologik imkoniyatlarga egaligi ularga xalqaro maydonda qanday ta'sir ko'rsatishi haqida tadqiqotlar olib boriladi. Bu jarayonni tushunish iqtisodiy geosiyosatning muhim jihatlaridan biridir.

Geosiyosatning metodologik yondashuvlari: Geosiyosatni tahlil qilish uchun bir nechta metodologik yondashuvlar qo'llaniladi. Quyida ushbu yondashuvlarning asosiylari keltirilgan:

Tizimli yondashuv: Ushbu yondashuv davlatlarni xalqaro tizimning bir qismi sifatida ko'rib chiqadi. Ular o'rtasidagi munosabatlar va kuchlarning taqsimoti ushbu tizimning rivojlanishini belgilaydi. Tizimli yondashuv Hans Morgentau va Kenneth Waltz kabi nazariyotchilar tomonidan rivojlantirilgan[3].

Tarixiy tahlil: Tarixiy jarayonlarni o'rganish geosiyosiy hodisalarni chuqur tushunishga yordam beradi. Bu yondashuv millatlararo munosabatlarning ildizlarini va ularning hozirgi ahvolini tahlil qilish uchun ishlatiladi.

Kartografik yondashuv: Siyosiy haritalar asosida olib boriladigan tahlillar davlatlarning geografik joylashuvi va ularning siyosiy strategiyalariga ta'sir ko'rsatishini tushunishga yordam beradi.

Modellashtirish: Zamonaviy texnologiyalar yordamida geosiyosiy jarayonlarning modellarini yaratish va prognozlash usuli. Bu yondashuv hozirgi zamonaviy geosiyosiy tahdidlarni o'rganishda muhim ahamiyat kasb etadi[4].

Geosiyosiy jarayonlarning hozirgi holati

Bugungi kunda geosiyosat globalizatsiya, mintaqaviy integratsiya va texnologik taraqqiyot ta'siri ostida tez o'zgarib bormoqda. Xitoy, Rossiya, AQSh va Yevropa Ittifoqi kabi yirik o'yinchilar o'rtasida kuch balanslari shakllanmoqda. Geosiyosiy jarayonlarda energetik resurslar uchun kurash, mintaqaviy konfliktlar va iqlim o'zgarishi muhim omillardan hisoblanadi[5].

So'nggi yillarda geosiyosatda quyidagi yangi trendlar shakllanmoqda:

Texnologik raqobat: Sun'iy intellekt, kiberxavfsizlik va kosmik texnologiyalar sohasidagi rivojlanish davlatlararo raqobatning yangi maydonlarini yaratdi. Bu, ayniqsa, AQSh va Xitoy o'rtasida sezilarli darajada namoyon bo'lmoqda.

Iqlim o'zgarishi: Iqlim muammolari mintaqaviy va global darajada geosiyosiy qarorlarni shakllantirishda yangi omilga aylandi. Arktika kabi hududlar iqlim o'zgarishining ta'sirida strategik ahamiyat kasb etmoqda.

Energetik o'tish: An'anaviy energiya manbalaridan qayta tiklanuvchi energiya resurslariga o'tish davlatlararo hamkorlik va raqobatni qayta shakllantirmoqda.

Xulosa o`rnida geosiyosatning ilmiy va metodologik asoslari xalqaro munosabatlar va davlatlar o'rtasidagi kuch balanslarini chuqur tahlil qilishga imkon beradi. Bu fan nafaqat nazariy, balki amaliy ahamiyatga ham ega bo'lib, davlatlarning siyosiy qarorlarini shakllantirishda muhim rol o'ynaydi. Kelajakda geosiyosiy tadqiqotlarni chuqurlashtirish mintaqaviy va global muammolarga yechim topishda yordam beradi.

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THE ROLE OF ECONOMICS EDUCATION IN SOCIETAL DEVELOPMENT AND FUTURE CHALLENGES

Annotation: *This article offers a comprehensive exploration of the importance of economics education, outlining its historical development, key disciplines, and the evolving nature of the field in the modern world. The historical overview emphasizes the evolution of economics, from its early roots in agricultural societies to its current focus on digital transformation and globalization.*

Keywords: *Development of Economics, Modern Economics, Connection to Economics, Financial Economics, Economics Education.*

Economics plays a pivotal role in shaping societies by influencing resource allocation, policy decisions, and financial systems. With rapid technological advancements and globalization, the need for well-trained professionals in economics has grown significantly. This article explores the significance of economics education, its evolution, key disciplines, and the future prospects for students pursuing this field.

1. The Historical Development of Economics.

Economics as a discipline has evolved over centuries, reflecting societal changes and advancements.

- Early Beginnings:

Rooted in agricultural societies, economics initially revolved around trade and resource management.

- Industrial Revolution:

The emergence of factories and urbanization shifted the focus to production, labor, and capital.

- Modern Economics:

Today, economics incorporates digital transformation, global markets, and data-driven decision-making.

Understanding this historical context helps students grasp the foundations of economic theories and their relevance to contemporary challenges.

2. Education and Its Connection to Economics.

Education is central to nurturing competent economists who can address modern economic challenges.

- Theoretical Knowledge:

Subjects such as microeconomics, macroeconomics, and econometrics provide a strong academic foundation.

- Practical Skills:

Analytical tools like statistical software, financial modeling, and policy analysis enable students to apply theories in real-world scenarios.

- Global Perspective:

Exposure to international case studies equips students to tackle issues like trade imbalances, economic crises, and sustainable development.

3. Major Disciplines within Economics.

Economics encompasses various specialized fields, each addressing unique aspects of economic activity:

- Macroeconomics:

Examines national and global economic trends, including GDP growth, inflation, and monetary policies.

- Microeconomics:

Focuses on individual and business decision-making, market structures, and pricing strategies.

- Financial Economics:

Explores investment strategies, corporate finance, and risk management. \

- Environmental Economics:

Studies the economic impact of environmental policies and sustainable resource use.

By mastering these disciplines, students can diversify their career paths in academia, industry, or policymaking.

4. Economics Education in Uzbekistan.

Uzbekistan has undertaken significant reforms to enhance its education system, particularly in economics.

- Government Initiatives:

Programs aimed at aligning the curriculum with international standards and fostering innovation.

- University Contributions:

Institutions like Qarshi International University focus on producing skilled professionals equipped to meet market demands.

- Global Collaboration:

Partnerships with foreign universities and organizations enhance research opportunities and cross-cultural learning.

5. Future Directions for Economics Graduates.

The evolving nature of global economies presents exciting opportunities and challenges:

- Digital Transformation:

Technologies such as artificial intelligence and blockchain are reshaping economic models and job markets.

- Green Economy:

Increasing demand for sustainable practices opens avenues in environmental economics and renewable energy policy.

- Entrepreneurship:

Economics graduates with entrepreneurial skills can drive innovation through startups and social enterprises.

To succeed, students must embrace lifelong learning and adapt to emerging trends.

Conclusion

Economics education is a cornerstone of societal progress, equipping individuals with the tools to understand and address complex issues. By combining robust academic training with practical experiences, universities can nurture future leaders who will contribute to economic stability, innovation, and sustainable development. The future of economics lies in the hands of those who are prepared to tackle its ever-changing landscape.

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THE DEVELOPMENT OF THE DIGITAL ECONOMY

Annotation: *This article explores the development of the digital economy, highlighting its significance in modern global economic systems. It examines the key factors driving the transformation, such as the expansion of internet access, the integration of innovative technologies and the rise of the data economy. The article discusses the positive impacts of the digital economy on economic growth, job creation, and global trade, while also addressing the challenges and risks it poses, including digital inequality, cybersecurity concerns, and technological unemployment.*

Keywords: *Digital Economy, Cloud Computing, Blockchain, Big Data, Economic Growth, Digital Transformation, E-commerce.*

The digital economy refers to an economic system that is driven by digital technologies, enabling production, supply, consumption, and other economic activities through these innovations. This transformation is facilitated by technological advancements such as the internet, artificial intelligence, data analytics, and cloud computing. The development of the digital economy is reshaping industries and has a significant impact on the global economic landscape, contributing to economic growth and changing the way businesses and consumers interact.

Factors Driving the Development of the Digital Economy.

Several factors are contributing to the rapid development of the digital economy:

1. The Internet and Digital Infrastructure.

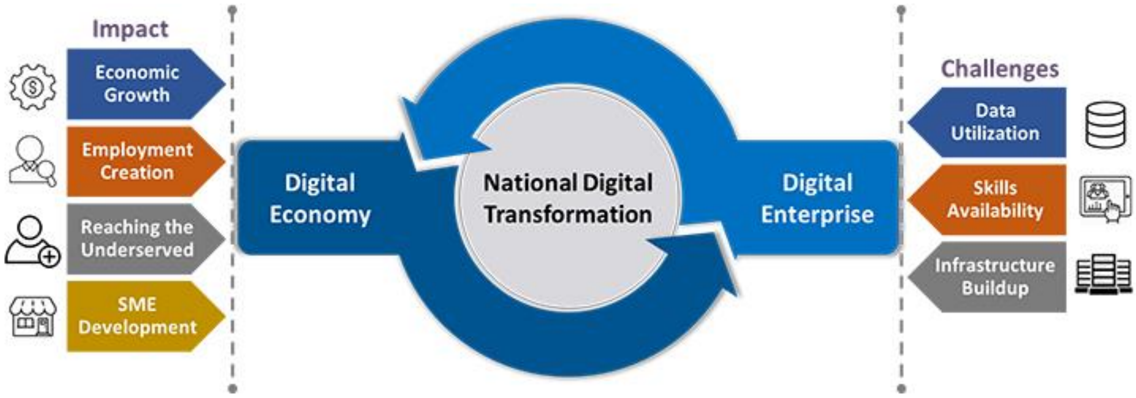
The expansion of the internet and improvements in its speed and accessibility form the foundation of the digital economy. This infrastructure allows individuals and companies to connect globally and access various digital services.

2. Innovative Technologies.

Technologies such as Artificial Intelligence (AI), the Internet of Things (IoT), cloud computing, and blockchain are key drivers of the digital economy. These innovations enable more efficient production and delivery of goods and services, transforming industries across the globe.

3. Data Economy (Big Data).

The collection and analysis of big data play a crucial role in the digital economy. By leveraging vast amounts of data, businesses and governments can make more informed and precise decisions, driving growth and efficiency.



Impact of the Digital Economy on Economic Systems.

The development of the digital economy is transforming various economic systems and has far-reaching impacts:

1. Transformation of Job Markets.

The digital economy is creating new jobs while also changing or replacing existing ones. Automation and AI technologies are particularly influencing the types of work available, leading to shifts in workforce requirements.

2. Digitalization of Products and Services.

Traditional products and services are increasingly being digitized. E-commerce, digital finance, and online services are examples of industries where digitalization is reshaping business models and consumer experiences.

3. Impact on Global Economic Growth.

The digital economy provides new opportunities for global trade and cooperation. By connecting markets, digital technologies contribute to the acceleration of economic growth and the expansion of global supply chains.

Challenges and Risks of the Digital Economy.

Despite the positive impacts, the development of the digital economy presents certain challenges and risks:

1. Digital Inequality.

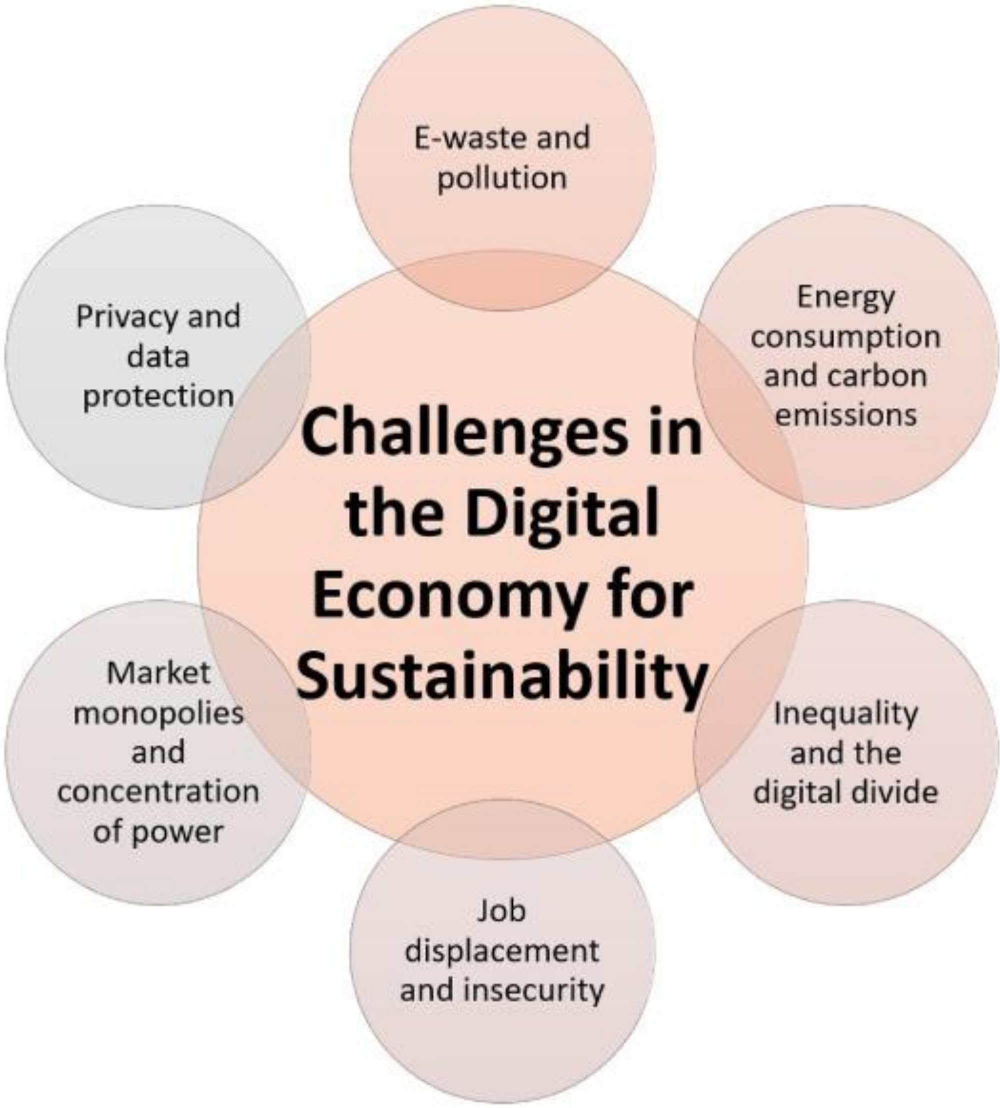
The unequal distribution of digital infrastructure and internet access can exacerbate social and economic inequality. Those without access to digital tools and resources are left behind in the digital transformation process.

2. Cybersecurity Risks.

As digital technologies expand, cybersecurity concerns are becoming more prominent. Protecting sensitive data and safeguarding against cyberattacks are critical challenges for businesses and governments.

3. Technological Unemployment.

Automation and artificial intelligence may replace certain jobs, leading to technological unemployment. The challenge lies in creating new job opportunities and reskilling workers to meet the demands of the digital economy.



Conclusion and Recommendations.

For the successful development of the digital economy, it is essential for governments, businesses, and societies to work collaboratively. Investing in digital infrastructure, enhancing digital literacy and education, ensuring cybersecurity, and addressing economic inequality are crucial steps to foster inclusive growth. Additionally, efforts to create new job opportunities and retrain workers to meet the demands of the evolving labor market will be key to mitigating the impact of digital transformation on employment.

The future of the digital economy presents both opportunities and risks. However, with proactive planning and adaptation, nations can harness the potential of digital technologies to create a more sustainable and prosperous economic system.

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THE IMPORTANCE OF STUDYING REGIONAL ECONOMICS

Annotation:*This article examines the significance of studying regional economics in the context of globalization and economic integration. It highlights how regional economics contributes to efficient resource utilization, reducing disparities, and fostering sustainable development. By analyzing key methods such as literature review, comparative analysis, and statistical data examination, the paper underscores the role of regional economic studies in formulating policies, enhancing competitiveness, and addressing regional inequalities. The findings provide valuable insights for policymakers, entrepreneurs, and researchers, emphasizing the importance of continued investigation into regional economic dynamics to achieve balanced and sustainable growth.*

Keywords

Regional economics, economic integration, resource utilization, regional disparities, sustainable development, globalization, regional policies, economic competitiveness, investment opportunities, environmental planning.

Introduction

In today's era of globalization and economic integration, the study of regional economics has become increasingly important. The changes in economic processes at the regional level worldwide contribute to enhancing the effectiveness of economic policies and strategies. This topic is not only relevant for economists but also for policymakers and entrepreneurs.

The growing complexity of supply chains, the localization of industries, and the need for sustainable development have all highlighted the importance of regional economic analysis. Policymakers rely on regional economic studies to identify disparities, allocate resources efficiently, and formulate strategies that encourage equitable growth. Entrepreneurs, on the other hand, can leverage regional data to identify investment opportunities and make informed decisions about market entry and expansion. Furthermore, regional economic studies are essential for addressing challenges such as unemployment, urbanization, and environmental degradation, as they provide localized solutions tailored to the specific needs and characteristics of each region.

Understanding the economic potential and constraints of regions allows governments and organizations to address inequalities, foster innovation, and improve overall competitiveness. By studying regional economics, stakeholders can better understand the interdependence between regions and contribute to the development of policies that enhance both local and global economic resilience.

Methods

In this article, the significance of studying regional economics is identified using the following methods:

1. Literature Review: Scientific articles and reports on regional economics were analyzed.
2. Comparative Method: The economic development of various regions was compared.
3. Statistical Data Analysis: Key indicators of regional economics, including GDP, unemployment rates, and investment flows, were examined.

Results

The findings highlight several key aspects of the importance of studying regional economics:

1. Efficient Resource Utilization: Analysis of economic resources in regions helps ensure their optimal use.
2. Reducing Regional Disparities: Research results indicate that balanced distribution of economic growth reduces disparities between regions.
3. Identifying Investment Opportunities: Analysis of the economic potential of regions enables entrepreneurs to identify promising sectors.
4. Enhancing Competitiveness: Developing strategies for regional economics boosts inter-regional competition and facilitates adaptation to global market demands.

Discussion

The study of regional economics plays a significant role in the formulation of national and global economic policies. For instance, the analysis of economic relations among Asia-Pacific countries demonstrates that regional cooperation increases trade volumes and stimulates socio-economic development. At the same time, it is essential to develop strategies to eliminate economic disparities between regions.

The study of regional economics plays a multifaceted role in the formulation of national and global economic policies. At its core, it helps identify the unique strengths and weaknesses of different regions, enabling the development of tailored strategies to enhance regional growth. For example, understanding the economic interdependencies between regions allows policymakers to prioritize infrastructure investments, improve transportation networks, and foster connectivity that benefits multiple areas simultaneously.

A critical aspect of regional economic studies is their role in reducing economic inequalities. For instance, the comparison of highly developed regions with underdeveloped ones often reveals disparities in resource allocation, access to education, and employment opportunities. Addressing these disparities requires targeted interventions such as incentivizing industries to establish operations in less developed areas or investing in regional educational initiatives that align with local economic needs.

Moreover, regional economics provides insights into how globalization affects local economies. While some regions thrive due to their integration into global supply chains, others may struggle to compete. By analyzing these dynamics, governments can develop policies that mitigate adverse effects, such as protecting vulnerable industries or promoting diversification to reduce dependency on a single economic sector.

Another important dimension of regional economics is its impact on sustainability and environmental planning. Regional studies often highlight the environmental challenges unique to specific areas, such as resource depletion, pollution, or climate change impacts. Policymakers can use these insights to craft sustainable development plans that balance economic growth with environmental preservation, ensuring long-term viability for future generations.

Regional economic analysis also fosters collaboration between regions, both within and across national borders. For example, regional trade agreements and economic zones have proven to be effective tools for boosting trade, creating jobs, and fostering innovation. The success of initiatives like the European Union's cohesion policies underscores the importance of coordinated efforts in reducing regional inequalities and promoting collective growth.

Finally, the study of regional economics is crucial in the context of crises such as economic recessions, pandemics, or geopolitical tensions. Understanding regional vulnerabilities and strengths allows governments to respond more effectively to such challenges, ensuring that recovery efforts are inclusive and equitable. For example, during the COVID-19 pandemic, regions with diversified economies and strong local supply chains demonstrated greater resilience compared to those heavily reliant on a single industry.

Conclusion

The study of regional economics has become an integral part of the modern global economy. It is crucial not only for ensuring economic growth but also for strengthening regional cooperation and achieving sustainable development goals. Therefore, further research, expanded scientific investigations, and the development of practical guidelines in this field are necessary.

Moreover, regional economics is vital for achieving long-term sustainability. By addressing environmental challenges and encouraging the efficient use of resources, it ensures that economic development aligns with global sustainability goals. This balance between growth and environmental stewardship is critical for ensuring the well-being of future generations.

The integration of regional economic analysis into policymaking also strengthens global interconnectedness. Collaborative efforts between regions—whether through trade agreements, shared infrastructure, or joint innovation initiatives—help build resilience to global economic shocks and enhance overall economic stability.

As globalization and technological advancements continue to reshape the world economy, the role of regional economics becomes even more prominent. It provides the analytical tools necessary to navigate complex challenges and seize emerging opportunities. To this end, further research and practical applications in the field of regional economics are essential for fostering inclusive, sustainable, and prosperous development on both local and global scales.

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GREEN MARKETING AND SUSTAINABILITY: EXPANDING INSIGHTS

Abstract:*This article delves into the comprehensive scope of green marketing and sustainability. Green marketing transcends traditional advertising, embedding environmental responsibility across all facets of business, from product design to marketing strategies. This paper explores the evolution of green marketing, the characteristics of green products and consumers, the challenges in emerging markets such as India, and innovative solutions for overcoming green marketing myopia. Additionally, it highlights global trends, the role of certifications, successful case studies, and future directions. The research emphasizes the necessity for businesses, consumers, and policymakers to collaboratively foster a sustainable future.*

Keywords: *Green Marketing, Sustainability, Eco-Friendly Products, Green Consumers, Environmental Responsibility, Green Certifications, Sustainable Practices, Green Labels, Emerging Markets, Innovation, Consumer Behavior.*

Introduction. Green marketing has evolved into a critical component of modern business strategies, emphasizing sustainability and environmental ethics. Unlike traditional marketing, green marketing integrates eco-friendly practices throughout the product lifecycle—from conceptualization and production to distribution and disposal. As consumer awareness of environmental issues grows, businesses must adapt by aligning their operations with sustainable principles.

Green marketing’s origins trace back to the 1975 American Marketing Association (AMA) workshop on "Ecological Marketing." Over decades, it has transformed from a niche initiative to a global imperative, addressing not only consumer goods but also industrial products and services. This approach ensures a harmonious balance between environmental conservation and market competitiveness.

Broadening the Definition of Green Products. Green products minimize environmental harm through innovative design, resource efficiency, and reduced toxic outputs. These products often feature:

- **Recycled Materials**: Utilizing post-consumer waste in manufacturing.
- **Minimal Packaging**: Reducing material usage and promoting biodegradability.
- **Energy Efficiency**: Lowering energy consumption throughout the product’s lifecycle.
- **Local Sourcing**: Minimizing carbon footprints by reducing transportation.

Emerging trends include carbon-neutral products and renewable energy-powered manufacturing processes. These developments illustrate the expansive potential of green marketing.

Characteristics of Green Consumers

Green consumers exhibit environmentally driven purchasing behaviors and brand loyalty. Key attributes include:

- **Awareness**: A deep understanding of environmental issues.
- **Willingness to Pay Premiums**: Prioritizing sustainability over cost.
- **Preference for Local and Ethical Brands**: Supporting businesses that align with their values.

In India, green consumers face barriers such as limited availability of eco-friendly products and inadequate labeling. Overcoming these challenges is crucial to unlocking the market's potential.

Challenges in Emerging Markets: The Case of India

India, with its burgeoning consumer base, presents significant opportunities and challenges for green marketing. Key hurdles include:

- **Limited Infrastructure:** Insufficient distribution networks for green products.
- **Lack of Awareness**: Consumers often struggle to identify genuinely sustainable options.
- **Economic Constraints**: High costs deter price-sensitive buyers.

Successful green brands like Dettol and Tata Indicom demonstrate the potential of targeted strategies, including educational campaigns and accessible pricing models.

Green Certifications and Labels

Green certifications such as ISO 14001 provide credibility and foster consumer trust. The three primary types of environmental labels include:

1. **Type I (ISO 14024):** Independent certifications based on lifecycle assessments (e.g., European Ecolabel).
2. **Type II (ISO 14021):** Self-declared environmental claims requiring oversight.
3. **Type III (ISO 14025):** Quantified environmental data for product comparisons.

Emerging certifications, like carbon footprint labels, further enhance transparency and encourage sustainable consumer choices.

Green marketing myopia occurs when businesses overemphasize environmental benefits at the expense of consumer needs. Effective strategies to counteract this include:

- **Value Positioning**: Highlighting both eco-benefits and consumer advantages, such as cost savings.
- **Education:** Informing consumers about the practical benefits of green products.
- **Credible Claims**: Ensuring transparency and third-party endorsements.

Case Studies in Green Marketing Success

1. **Whirlpool's Energy-Wise Refrigerator**: Despite initial slow sales, this CFC-free, energy-efficient appliance eventually gained market recognition for its innovation.
2. **Tide Coldwater Detergent:** Promoting cold-water washing as both cost-effective and eco-friendly.

3. **Tesla Motors:** Transforming the automotive industry with luxury electric vehicles that prioritize sustainability.

The Future of Green Marketing

The trajectory of green marketing depends on:

- **Technological Innovation:** Advancing eco-friendly solutions through R&D.
- **Consumer Education:** Raising awareness about sustainable options.
- **Collaborative Efforts**: Aligning businesses, governments, and consumers toward common sustainability goals.

Companies must address affordability, accessibility, and authenticity to realize the full potential of green marketing.

Conclusion and Recommendations

Green marketing is pivotal in achieving global sustainability goals. Businesses should:

1. **Integrate Sustainability**: Embed environmental responsibility across all operations.
2. **Enhance Transparency**: Adopt certifications and clear labeling.
3. **Invest in Education**: Foster consumer understanding of eco-friendly practices.
4. **Leverage Innovations:** Utilize technology to improve product efficiency and reduce costs.

Collaborative efforts among stakeholders can create a sustainable ecosystem where profitability and environmental conservation coexist harmoniously.

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FORMATION AND DEVELOPMENT OF A MOTIVATIONAL ENVIRONMENT IN THE PROCESS OF PREPARING CHILDREN'S YOUTH SPORTS SCHOOL ATHLETES FOR COMPETITIONS (RUGBY-7) ON THE EXAMPLE OF SPORTS

Annotation: *in this article, the issue of the formation and development of a motivational environment in the process of preparing athletes for competitions in children's and youth sports schools is studied. On the example of rugby-7 sports, motivation factors, their influence on the results of athletes are analyzed. The results of the study are presented in the form of practical recommendations for coaches and educators.*

Keywords: *motivation, Children-Youth Sports, Rugby-7, competition preparation, motivation environment, sports psychology, team spirit.*

Introduction. In recent years, with increasing interest in children's-junior sports, it has become a necessity to develop effective methods aimed at increasing athlete readiness for competitions. The sport of rugby - 7, with its community-based characteristics, creates a favorable field for motivational research. This article will highlight the importance of the motivation environment and the methods of its formation in the process of preparing athletes for competitions. Rugby-7 is a short and fast game that requires team spirit, quick decision making, cooperation and high motivation.

These types of games test the physical and mental state of the athletes. Motivation, in turn, helps athletes achieve the best results in competitions. The link between motivation and teamwork keeps athletes on the road to success. A motivational environment is an important factor in preparing athletes for competitions. Its composition includes psychological training before competitions, interaction of team members, the leadership role of trainers and motivational methods. Methods used to increase motivation in certain situations: individual approaches, formation of a collective spirit, positive stimulation, analysis of learned experiences.

Purpose of the study: the purpose of this study is to study the factors of the formation of a motivational environment in the process of preparing athletes for competitions in children's and youth sports schools and develop recommendations for their development.

Objectives of the study:

1. Analysis of existing scientific approaches to motivation in children-adolescent sports.

2. Determination of the specifics of motivational factors in the sport of rugby-7.

3. Development of methodological recommendations for the formation and development of a motivational environment.

4. Assessment of the impact of motivation on the results of the competition of athletes.

Research methods:

1. Literature analysis: scientific articles and books on the topic were studied.

2. Poll and interview: polls were organized between coaches and athletes.

3. Observation: observations were made in the process of rugby-7 training and competitions.

4. Experiment: the effectiveness of methods aimed at increasing motivation was tested.

The results of the study and their discussion:

during the study, the main factors affecting motivation in children-adolescent sports were identified as:

* Internal motivation: the interest of athletes to improve their skills.

• External motivation: awards, recognition, support from parents and coaches.

• Social support: collective spirit and friendly relations.

* Psychological factors: training to build self-confidence and overcome fear.

Motivation is formed through various factors: there are different forms of motivation: internal (its own achievements, personal development) and external (rewards, incentives). In sports such as Rugby-7, internal motivation (such as fighting for team success) is of great importance. External motivation, that is, rewards or incentives, also increases the motivation of athletes in the process of preparing for competitions. The role of teamwork in the formation of a motivational environment: teamwork and mutual cooperation are very important in the sport of Rugby-7. To succeed as a team, athletes must develop mutual respect and trust. In a motivational environment, athletes are trained for higher outcomes through healthy competition, support, and Inter-learning processes. social support, team spirit and friendly relations that affect the motivation and training of athletes important factors are considered. The sport of rugby-7, with its team characteristics, has an important place in the formation of social support and team spirit. These topics can be covered at the following points:

1. Social support and its impact on motivation

Social support is emotional and spiritual support given to athletes by team members, trainers, parents, and other important individuals. Social support increases athlete confidence, reduces pre-competition stress, and increases motivation. In team sports such as Rugby-7, social support helps to foster interoperability, which strengthens the relationships of athletes.

Emotional support: Coaches and team members support athletes mentally. This, in turn, helps athletes to more positively and sincerely perceive the preparation for competitions. For example, in team trainings, positive feedback, stimulation and joint celebration of achievements increase motivation.

Informative support: The advice and experience of coaches and team members will help athletes develop their strategic and technical knowledge. This type of support increases motivation because athletes feel they have the resources they need to achieve their goals.

External support: parents and friends provide social and emotional support to athletes. Parents can support athletes before competitions, appreciate the achievements of their children and encourage them to succeed. This type of external support helps to increase the self-confidence of athletes.

2. **Collective spirit and its impact on motivation.**

- Team spirit is important in team sports such as Rugby-7. Team Spirit teaches athletes mutual trust, cooperation and mutual support. Team spirit guides athletes to one goal and forces them to support each other in the preparation for competitions.
- **Achieving team success:** In rugby-7, athletes must work together and succeed as a team. Team spirit is an important factor in motivation, as each athlete wants to benefit the team, and this effort increases their motivation.
- **Support each other:** Collective spirit means mutual support and support. To win competitions, athletes encourage and help each other. The team spirit enhances interaction and creates a positive psychological atmosphere between athletes.
- **Competitiveness and support:** It is important to develop healthy competition in the team, but to work together when athletes help each other and prepare for competitions. The collective spirit is necessary for mutual assistance, work distribution and joint success.

3. Friendly relations and their impact on motivation

- Friendly relationships help strengthen trust, respect and cooperation in the team. This provides athletes with mutual support and increases motivation to achieve a common goal. Friendly relations make athletes stronger, especially during the period of preparation for competitions.
  - **Trust and respect**: Friendly relationships form trust and respect among athletes. This, in turn, increases motivation, because athletes rely on each other and provide mutual assistance.
  - **Meetings and joint activities:** Athletes prepare for trainings, meetings and competitions together. In these processes, friendly relations are established, which increase their readiness and keep their motivations high.
  - **4. Methods for developing friendly relations**

To promote friendly relations, the following practical methods can be used in sports schools:

- **Interoperability in trainings:** Teaching athletes to understand each other and work together, developing teamwork.
- **Goal setting:** As a team, work together to set common goals and implement them.

- **Positive stimulation:** By encouraging athletes to develop friendly relationships, positive thoughts, encouragement, and support.

Social support, team spirit, and friendly relations play an important role in increasing athlete motivation and improving the process of preparing for competitions in children's-junior sports schools. In sports such as Rugby-7, these factors help to strengthen the interaction of athletes and strengthen motivation to succeed as a team.

Motivation specificity in rugby-7: The sport of rugby-7 requires a high level of teamwork from players. In this sport, motivation methods are important, aimed at increasing the sense of belonging of athletes to the team and achieving common goals. The role of trainers in increasing motivation: trainers play an important role in controlling the motivation of athletes in the preparation process. Trainers must use psychological techniques in their work to increase athletes ' self-confidence to help them achieve their best results. The goals set by the trainers, the formation of positive thoughts and the support of athletes strengthen the motivation process.

Practical recommendations:

1. Encourage athletes in training and give them the opportunity to demonstrate their abilities.
2. Increase team spirit by organizing team events and trips.
3. Conduct training on motivation methodologies for coaches.
4. Development of individual development plans for each athlete.

1. Setting and monitoring specific goals for athletes

- **Goal setting:** It is important for athletes to set current and long-term goals and determine the specific goals of each athlete. Goals must be clear and measurable (e.g. improving rugby technique in a given period of time or achieving success in team play).
- **Orderly monitoring:** Regular monitoring of athletes' achievements and developments, evaluation of the material studied, and showing results increase motivation.

2. Teamwork and community spirit development

- **Team training:** To develop the spirit of the team, it is necessary to organize team trainings, competitions and training. The unity and cooperation of the team increases the motivation of athletes. In the sport of rugby-7, each athlete must have a sense of connection and responsibility to their team.
- **Teamwork:** Directing trainings to teamwork, mutual assistance and celebrating achievements together. Through team training, athletes help each other and increase mutual trust.

3. Creating an incentive and reward system

- **Positive stimulation:** Positive motivation (e.g. celebrating a team's achievements, recognizing individual achievements) is of great importance in increasing motivation. Coaches and team members must give athletes explanatory incentives for their work and achievements.
- **Reward system:** To create an incentive system for athletes, that is, to reward each achievement or success. The awards increase the internal motivation of

athletes and encourage them to improve themselves. Rewards can be not only physical, but also mental (for example, recognition of personal achievements).

4. The role of trainers and their motivational approaches

- **Motivational approaches:** Trainers need to take different motivational approaches to motivate athletes, increase self-confidence in them, and give them motivation before competitions. The support and trust of trainers gives athletes great mental strength.
- **Communication and feedback:** Trainers need to communicate effectively with athletes, talk to them regularly, in addition to training, and exchange ideas about their needs, problems and goals.
- **5. Emotional and psychological support**
- **Psychological support:** Teach athletes how to manage stress and anxiety, behave in competitions, accept team wins or losses. Organization of motivational psychological exercises and trainings with the help of trainers and psychologists.
- **Emotional support:** Emotional support is necessary to increase the self-confidence of athletes. Trainers and parents must provide mental support to athletes, especially before major competitions and when failures occur.
- **6. Celebrating Individual and collective success**
- **Individual recognition of success:** Recognition and award of individual achievements of each athlete. For example, a special celebration of athletes who have achieved individual goals.
- **Celebrating collective success:** Celebrating the successes achieved as a team, it helps to appreciate not only achievements, but also cooperation.
- **7. Application of creative and innovative techniques.**
- **Innovative approaches:** Organization of innovative methods for motivating athletes, for example, various games, challenges, motivational videos and trainings. This gives athletes the opportunity to test themselves, learn new skills and increase their motivation.
- **Competitive matches:** Making it possible for athletes to test themselves through competitive but friendly games and training. This method also helps in the development of team spirit.

8. Harmonization of physical and psychological training

- **Physical fitness:** Physical fitness, physical development and muscle strengthening are important to achieve success in the sport of rugby-7. Making athletes physically strong and resilient increases their self-confidence.
- **Psychological preparation:** Increase the psychological training of athletes, manage stress before and during competitions, concentrate and develop strategic thinking.
- • It is important to apply the above practical recommendations for the formation and development of the motivation of athletes in children's and youth sports schools. It is of great importance in improving team spirit, setting

specific goals for athletes, creating an incentive system, providing support for trainers and guiding athletes to success in psychological support processes. In team sports such as Rugby-7, these recommendations are effective in improving athlete training and preparing them for competitions.

Conclusion. The formation of a motivational environment in a children's-youth sports school is important in the preparation of athletes for competitions. Studies using the example of rugby - 7 sport have shown that it is possible to increase the effectiveness of the training process by identifying motivational factors and understanding their impact on sports results. The article highlighted the importance of the formation and development of a motivational environment in the process of preparing athletes for competitions in children's and youth sports schools. On the example of rugby-7 sports, teamwork, quick decision-making and a high level of motivation are required. For the successful implementation of this process, the need to effectively use motivational techniques in the training of athletes was emphasized. In conclusion, the role of trainers in the formation of a motivational environment in the process of preparing athletes for competitions is of great importance. Trainers, in turn, should apply effective techniques to develop the internal motivation of athletes, strengthen team spirit and create a positive psychological environment. In sports such as Rugby-7, a motivational environment can be developed through teamwork, respect for each other and the formation of trust. At the same time, the harmonization of internal and external forms of motivation helps to improve the physical and mental training of athletes in achieving their goals. In order to increase the level of motivation, there is an important role in mutual communication and stimulation in the training process. In addition, achieving personal achievements of athletes creates opportunities to show high results through team successes.

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TRADE RELATED OF THE CITIES OF THE TURKESTAN GENERAL GOVERNORATE AT THE END OF THE 19TN CENTURY

Abstract: *The article examines the trade relations of the city of Kokand with the Turkestan Governorate General, Bukhara, Kashgar. Trade turnover with the Kazakhs, Kyrgyz, East Turkestan. The main goods imported to Kokand and exported from Kokand. Trading partners of Kokand. Annual trade turnover with neighboring countries. Caravan routes between Bukhara, Tashkent and Kokand. Indian goods imported to Kokand via Bukhara and Chinese goods from East Turkestan.*

Keywords: *Kokand, Tashkent, trade, market, traders, trade relations, merchants, goods, Bukhara, Tashkent, caravan.*

Introduction.

In the economic life of Tashkent, Kokand and Samarkand, foreign trade with Bukhara, Khiva, Kashgar, India, Afghanistan, Iran and especially with Russia was of great importance. After the tsarist troops had established themselves in Tashkent (1865) and tsarism could dictate its terms to the neighboring khanates, in 1867, after the formation of the Turkestan General Governorate, the Orenburg and Siberian customs lines were inside the country and, naturally, were removed. [1]

One of the first measures in this regard by the first Turkestan Governor-General K.P. Kaufman was the conclusion of a trade agreement with the Kokand Khanate in 1868. As a result of this agreement, all cities and villages of the Kokand Khanate without exception became open to Russian merchants. They were allowed to have their own caravanserais in any place, in which they could store goods. In order to monitor the correct course of trade and the legal collection of duties, Russian merchants were granted the right, if they wished, to have their own trade agents in any city.

The actual data shows that Kokand the Khanate and Tsarist Russia were mutually interested in establishing trade relations, although at the time in question Russia was practically receiving much more benefit from trade than Kokand. Tsarist Russia dictated its trade conditions to the Khanate. Kokand could not do this. Kokand's dependence was especially clearly expressed in the trade agreement of 1868, according to which fixed duties were established on exported goods in the amount of 0.5% of their value. Russian trade caravans were also allowed to cross from the territory of the Kokand Khanate to neighboring countries without paying customs duties and were guaranteed free and safe stay in the Khanate. Russia 's trade relations with the Kokand Khanate influenced the development of agriculture and the penetration of some elements of Russian culture into everyday life. The Kokand

Khanate gradually turned into one of the raw material regions of the light industry of Tsarist Russia and one of the external bazaars. The material we are studying also shows that successful Russian- Kokand trade relations played a generally progressive role for the Kokand Khanate. But for the city of Kokand they played a negative role, since the introduction of Russian goods slowed down the development of some branches of local industry and displaced some types of handicraft goods from the Kokand bazaars.

All goods coming from the Russian borderlands to Kokand or from there to Russia were to be taxed at the same rate as in the Turkestan region, i.e. two and a half percent of the value of the goods. Russian merchants with their caravans were granted free and safe passage through the Kokand lands to the lands adjacent to Kokand. These conditions were very advantageous for Russian trade and therefore it is not surprising that M. A. Terentyev wrote: “Of all the bazaarss, we can consider only Kokand to be ours, surrounded on three sides by our lands and cut off from the rest of our neighbors by almost impassable mountains”. [2]

Main part.

In Kokand and other cities of the khanate, mainly Russian goods were brought from Tashkent. Kokand traded with Russia through Tashkent, in total, 10 thousand to 15 thousand camels passed between these cities per year. The trade turnover between Tashkent and Kokand by the middle of the 19th century was about 7 million rubles.

The proximity of Tashkent to the cities of the Kokand Khanate gave Tashkent merchants the opportunity to conduct lively trade with these cities, which created a turnover of capital several times a year. The merchants themselves said that it was mainly small traders who traded with the cities of the Kokand Khanate. Larger capitalists of Tashkent kept their clerks in these cities, who informed them of the needs of these places, and thus gave them the opportunity to conduct correct and risk-free trade. In terms of the total amount of annual turnover, trade with Kokand occupied first place in the trade of Tashkent merchants.

It should be noted that exports from Kokand to Tashkent always exceeded imports. This is explained by the fact that, firstly, Kokand goods were transported through Tashkent to the Kazakh steppe and Russia, and secondly, in addition to their own products, Kokand merchants brought in transit Chinese and Indian goods.

After the conquest of Tashkent by Russia, the trade turnover between Tashkent and Kokand increased. Kokand began to receive a larger amount of Russian goods through Tashkent. In 1870, the Turkestan Governor-General Kaufman, "in order to develop local trade and industry and to ensure that all residents of this region have the most profitable, reliable and quick sale of their products, deigned to establish two fairs in the city of Tashkent annually, namely: one in the fall from April 1 to April 15" [3]. To attract merchants to the fair, the Turkestan Governor-General abolished the duty on goods brought to Tashkent. Caravans from Central Asia, Afghanistan, Iran, China, and India began to arrive here.

In terms of turnover at the Tashkent fair, Kokand took second place after Russia. Kokand merchants took the most active part in the Tashkent fair. If the turnover in trade was 6,225,888 rubles [4], then only in Kokand, goods worth approximately 1,690 thousand rubles were exported from this amount.

In the Kokand-Tashkent trade, the leading place belonged to Kokand merchants. The share of Tashkent merchants in this trade was about 30 percent of the total trade turnover between these cities.

There were traditional trade links between Kokand and the southern and southeastern regions of nomadic Kazakhstan. One of the authors of the Russian Geographical Society wrote: “The role of Kokand traders annually disperses across the steppes separating Kokand from Russia and China and exchange quilted cotton robes, blankets and various types of fabric for leather, cattle, wool, fat and furs”. [5]

In the 20-30s of the XIX century, the Kokand rulers built a number of fortresses in the territory of Southern Kazakhstan, such as: Jani-Kurgan, Djulek , Din-Kurgan, Ak-Mechet, Kamish -Kurgan , Aulie-Ata and others. Each of them had military barracks, mosques, warehouses and forges. Trying to facilitate the purchase of raw materials by Kokand merchants and to strengthen the sale of the urban handicraft industry, residential buildings for traders, shops and bazaars were subsequently built in these fortresses. In some of these fortresses, trade developed and large caravans from different cities began to come here. But the main suppliers of goods to the Kazakh steppe were merchants from Tashkent, Kokand and Andijan [6].

To the Kazakh steppe dukhabs, robes, boots, cauldrons, knives, blankets, and also decorative items were exported from Kokand. As G. Kolmogorov stated, “decorations of the best finish made of silver and gold, as well as knives, daggers, whips in sheaths and frames, and belts with gold and precious stones were brought ready-made from Bukhara, Kokand, and Tashkent” [7].

The main exports from the Kokan Khanate were silk fabrics, silk, goat wool, horses, and narcotics. The Central Asian horse trade was one of the most profitable sources. In addition, 20 lakhs of gold were exported from Central Asia to India annually. The Kokandis brought products made of Russian iron, cast iron, and steel to the Bukhara bazaars, as well as rice, tobacco, and sometimes Chinese and local silk fabrics, tea, and porcelain ware. But these trade relations were interrupted by internecine wars. However, trade relations between Kokand and Bukhara had their advantages. For example, carts were used to transport goods along the Kokand-Bukhara road, because "these lands themselves created conditions for merchants to transport such goods". But the main carrier was the camel. The caravan traveled from Bukhara to Kokand in 20-22 days. They paid 2.5-3 gold for a cargo camel. The route of the caravan was as follows: Bukhara-Samarkand-Jizzakh-Zomin-Oratepa-Khujand-Makhram-Besharik-Kokand. Also: Bukhara-Samarkand-Yangikurggan-Jizzakh-Rovot-Jom-Oratepa-Khujand-Makhram-Besharik-Kokand.

From Tashkent to Kokand there was a caravan route, which was convenient for traveling by cart. This road crossed the Chirchik River on a ferry near Koyluk and the Syr Darya before Chilmakhram. The road from Avlieta to Kokand was difficult.

It passed through the mountains, passing the Karabura and Chanysh rivers, through Namangan and through the village of Eskiabad to Kokand. Thus, the caravan had to go 20 miles along a dirt road in the Fargon Plain, passing the Syr Darya at Sang. The road from Namangan to Tashkent passed through good and populated areas. From Osh to Jizzakh there was a large caravan route, which was easy to travel by cart and by cart, it lay mainly through the Fergana Valley. This road also led to Margilan, Kokand and Khujand. From Kokand to Kulob through the territory of Karategin and Vokhan there was a road to Rishton, Langar, the Shokhkend pass, Chimildir and Khanabad. Trade relations between Kokand and Russia grew stronger every year. For example, I. I. Yanzhul analyzed the duties paid to the Orenburg customs for a hundred years (1758-1853). Russian merchants used to receive 100 percent of profit, then from 70 to 50, but not less than 40 percent. Analyzing the figures, I. Yanzhul noted that from 1758 to 1855, the export of goods increased from 174,000 to 2,171,000 silver rubles, and import - from 37,000 to 676,000 silver rubles.

1870, a fair was established in Tashkent. Of particular interest is the information about the turnover of goods of Kokand merchants, allowing us to imagine the scale of Kokand -Russian trade in connection with the opening of the fair, demonstrating the ever-increasing role of the Kokand Khanate in the supply of raw materials, especially cotton, mats, and silk. Thus, a total of 206,039 rubles worth of cotton were brought to the fair, including 191,052 rubles from Kokand, 118,417 rubles worth of mats, including 88,440 rubles from Kokand, including 23,779 rubles from Kokand, 17,007 rubles worth of silk, including 14,614 rubles from Kokand [8].

After the formation of the Turkestan Governorate-General and until the end of the 80s of the XIX century, imports to the city of Kokand exceeded exports. Since the 90s, the export of goods from Kokand costs several million rubles. Thus, in 1894-1895 the difference in favor of Kokand was 13,956,132 rubles. During the revolution of 1905-1907, there was a significant decrease in trade between Kokand and Russia, for example, in 1905, only 2,156,186 pounds were sent from Kokand to Russia. 4,333,081 pounds arrived from Russia. The decrease in freight turnover that year is explained by mass strikes of railway workers and a shortage of rolling stock. The decrease in trade turnover in Kokand also affected the reduction of trade and industrial enterprises.

Central Asian traders exchanged their goods in the steppe for small and large cattle. Thus, traders annually brought up to 200 thousand heads of rams to Tashkent, about 100 thousand to Kokand and 100 thousand to Bukhara [9]. Speaking about the successful barter trade of Tashkent and Kokand residents with the Kazakhs.

Later, in the territory of Southern Kazakhstan, grain cultivation began to develop and grain from these places began to be exported to the Fergana Valley. In the summer, on bazaars days, 80 to 100 carts with grain alone arrived at the Kokand bazaars [10].

Regularity and improvement of trade in general also depended on the conditions of transport and the caravan routes themselves. In this regard, the Kokand

and Bukhara traders had their advantages. The road between these cities was flat and carts were often used to transport goods.

One of the main items exported from Kokand to Bukhara was silk and silk materials, of which up to 8 thousand poods per were exported year [11]. According to some authors, Kokand silk was of higher quality than Bukhara silk. The best quality silk, called “chilla”, was produced in Kokand. This variety was exported to Bukhara, and from there to Afghanistan and India.

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THE ROLE OF FORMATIVE AND SUMMATIVE ASSESSMENT IN SHAPING INSTRUCTION

Annotation: *In contemporary education, assessment is not only a tool for measuring student achievement but also an essential mechanism for guiding instructional decisions. The interplay between formative and summative assessments shapes the way teachers plan, execute, and adjust their teaching strategies. Formative assessments, conducted during the learning process, offer real-time feedback that can inform teaching practices, while summative assessments evaluate the final outcomes of instruction. This article explores the roles of both formative and summative assessments, examining their contributions to instructional planning and student learning, and discusses how their integration can foster a dynamic and effective educational environment.*
Key Words: *assessment, learning, process, strategy, contribution, effective, examining, integration.*
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ISFT

O'QITISHNI SHAKLLANTIRISHDA SHAKLLANTIRUVCHI VA SUMMATIV BAHOLASHNING ROLI

Annatatsiya:*Zamonaviy ta'limda baholash nafaqat o'quvchilarning yutuqlarini o'lchash vositasi, balki o'quv qarorlarini boshqarishning muhim mexanizmidir. Formativ va summativ baholash o'rtasidagi o'zaro ta'sir o'qituvchilarning o'qitish strategiyasini rejalashtirish, amalga oshirish va tuzatish usullarini shakllantiradi. O'quv jarayoni davomida o'tkaziladigan formativ baholash o'qitish amaliyoti haqida ma'lumot berishi mumkin bo'lgan real vaqt rejimida fikr-mulohazalarni taklif qiladi, summativ baholash esa ta'limning yakuniy natijalarini baholaydi. Ushbu maqola formativ va summativ baholashning rolini o'rganadi, ularning ta'limni rejalashtirish va talabalarni o'rganishga qo'shgan hissasini o'rganadi va ularning integratsiyasi dinamik va samarali ta'lim muhitini qanday rivojlantirishi mumkinligini muhokama qiladi*
Kalit so'zlar: *baholash, o'rganish, jarayon, strategiya, hissa, samarali, tekshirish, integratsiya.*

Assessment has long been considered a central pillar of educational practice. Traditionally, assessments were viewed primarily as tools for evaluating student learning at the end of a course or unit. However, the increasing recognition of assessment's broader role in guiding teaching and learning has led to a deeper exploration of its impact on instructional practices. Two primary types of assessment—formative and summative—play distinct but complementary roles in shaping instruction. Understanding how these assessments function and how they can be integrated into teaching strategies is essential for educators aiming to foster student success.

Formative Assessment: Formative assessment refers to the ongoing, real-time assessments conducted during the learning process. These assessments are typically low-stakes, meaning they do not contribute directly to a student's final grade but are used to monitor progress and identify areas of improvement. Common examples of formative assessments include quizzes, class discussions, group activities, observations, peer assessments, and written reflections.

The primary goal of formative assessment is to inform both the teacher and the student about the learner's current understanding. This allows for adjustments to be made to instruction and learning strategies before a final evaluation occurs. In essence, formative assessments provide feedback that can improve learning

In contrast, summative assessment is designed to evaluate the overall effectiveness of instruction and the extent to which students have mastered the learning objectives at the end of a particular period, such as a unit, semester, or course. These assessments are typically high-stakes and contribute directly to a student's final grade. Examples of summative assessments include final exams, end-of-term projects, standardized tests, and final papers.While summative assessments do not generally provide opportunities for immediate feedback, they serve an important function in certifying student achievement and guiding curriculum adjustments for future cohorts. Formative assessments offer significant benefits to instructional practice. The feedback derived from these assessments helps to pinpoint specific gaps in knowledge or skills, enabling teachers to adjust their teaching methods in real time. This dynamic and responsive aspect of formative assessment allows for differentiated instruction tailored to the diverse needs of students.

One of the key advantages of formative assessments is the ability to provide individualized feedback. By using a variety of formative assessments—such as quizzes, check-ins, and peer reviews—teachers can identify students' strengths and weaknesses, allowing them to offer targeted support. This individualized attention is particularly beneficial in diverse classrooms where students may be at different levels of understanding. Formative assessments allow teachers to make timely adjustments to their teaching. For instance, if a teacher discovers that a large portion of the class struggles with a particular concept, they can modify their lesson plans, provide additional resources, or offer small-group sessions to clarify the material. This ensures that no student is left behind and that instruction remains relevant and responsive to students' needs. Frequent formative assessments can also enhance student engagement. When students are regularly assessed and receive timely feedback, they are more likely to take an active role in their learning process. The opportunity to revise and improve upon their work after receiving feedback fosters a growth mindset, which encourages continuous learning and self-improvement.

Summative assessments, while often seen as evaluative tools, also play a crucial role in shaping instruction by providing a comprehensive picture of what students have learned over the course of a unit or program. These assessments help teachers gauge the effectiveness of their teaching and identify areas where instructional methods may need to be adjusted for future courses. ummative assessments serve as a means for teachers to assess the effectiveness of their instructional strategies. By analyzing trends in student performance on summative assessments, educators can determine whether the content and teaching methods were successful in helping students achieve the desired learning outcomes. If a significant number of students perform poorly, it may indicate that adjustments to teaching strategies or curricular content are necessary. Summative assessments also provide valuable data that can be used for curricular development. Teachers and curriculum developers can analyze performance data from summative assessments to identify patterns and trends across student cohorts. This feedback can guide future curriculum adjustments to better align with student needs, learning styles, and educational standards.Summative assessments serve as a key tool for holding both students and educators accountable. In many educational systems, summative assessments are used to report student achievement to stakeholders, such as parents, school administrators, and policymakers. These assessments also play a central role in standardized testing and accreditation processes, which can shape the future direction of educational institutions.

Integrating Formative and Summative Assessments for Instructional Improvement While formative and summative assessments serve distinct purposes, their integration offers a comprehensive approach to enhancing instruction. Formative assessments provide continuous feedback, allowing for real-time instructional adjustments, while summative assessments offer a final evaluation of student achievement and instructional effectiveness. When used in tandem, these assessments create a feedback loop that fosters both individual and systemic improvements in teaching and learning.

Formative assessments provide ongoing feedback that informs instructional decisions, and the results of summative assessments can be used to evaluate the impact of those adjustments. For example, a teacher may use formative assessments to identify a gap in student understanding during a unit, and then modify their instruction accordingly. At the end of the unit, the teacher can use the summative assessment to determine whether the adjustments led to improved student outcomes. This cycle allows for continuous refinement of teaching practices. An effective assessment strategy incorporates both formative and summative assessments in a balanced manner. By using a variety of assessment types—such as quizzes, projects, and exams—teachers can gather a comprehensive view of student learning. This approach helps ensure that students receive timely feedback on their progress while also being evaluated on their final mastery of the material. When formative assessments are integrated into the learning process, they encourage students to view assessment as an opportunity for growth rather than a final judgment. Students who receive regular, constructive feedback can identify areas for improvement and take ownership of their learning. The combination of formative and summative assessments fosters a mindset that values continuous learning, self-reflection, and resilience.

Conclusion

Formative and summative assessments both play critical roles in shaping instruction. While formative assessments provide ongoing feedback that allows for instructional adjustments and personalized learning, summative assessments offer a final measure of student achievement and instructional effectiveness. Together, these assessments create a dynamic, responsive learning environment that promotes student success. By effectively integrating formative and summative assessments into their instructional strategies, educators can enhance the learning experience, improve outcomes, and ensure that students are prepared for future academic and professional challenges. Incorporating both types of assessment into the educational process represents not just an evaluation of student progress, but a comprehensive, reflective approach to teaching that drives continual improvement for both teachers and learners.

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TO'RTINCHI SANOAT INQILOBI INTELLEKTUAL TIZIMIDA YOQILG'I-ENERGETIKA KOMPLEKSIDA

Annotatsiya. *Maqolada energetikani innovatsion rivojlantirish istiqbollari keltirilgan u maqolada "aqlli" elektr tarmoqlari asosida O'zbekiston energetika sektorinidagi komir sanoatining asosiy innovatsion rivojlantirish istiqbollari keltirilgan. "aqlli tizim" elektr tarmoqlari sifatida asosgan.*
Kalit so'zlar: *ko'z so'zlari:" aqlli tizim"elektr tarmoqlari; innovatsion rivojlanish istiqbollari; energiya tarmoqlari; innovatsion rivojlanish istiqbollari; energetika sektor; elektr energetikasi; modernizatsiya; boshqaruv; aqlli tarmoq. sektor; elektr energetikasi; modernizatsiya; boshqaruv.*
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THE IN FUEL AND ENERGY COMPLEX IN THE INTELLECTUAL SYSTEM OF THE FOURTH INDUSTRIAL REVOLUTION

Abstract. *The article presents the prospects for innovative energy development The article presents the main prospects for the innovative development of the Komi industry in the energy sector of Uzbekistan based on "smart" electric networks. The "smart system" is based on electrical networks.*
Keywords: *eye words:"smart system"electric grids; prospects for innovative development; energy grids; prospects for innovative development; energy sector; electric power industry; modernization; management; intelligent grid. sector; electric power industry; modernization; management.*

Sanoat 4.0 - bu ishlab chiqarishni kompyuterlashtirishni tavsiflash uchun yaratilgan atama. U samaradorlikni oshirish va samaradorlikni oshirishga qaratilgan uchta texnologik tendentsiyani birlashtiradi. Masalan, AI va mashinani o'rganish vazifalarni avtomatlashtirish va inson operatorlariga monitoring tizimlariga e'tibor qaratish imkonini berish orqali inson mehnatini kamaytirishi mumkin. Bu daromad va mahsuldorlikni oshirishi mumkin. Shuningdek, u bashoratli va profilaktik xizmat ko'rsatishni ta'minlash orqali kapital xarajatlarni kamaytirishi mumkin. Kompyuterlar bilan o'zaro munosabatimizni o'zgartirmoqda. Bu kompaniyalarga yaxshiroq mahsulotlar yaratish va jarayonlarni yaxshilashga yordam beradi. Bundan tashqari, xarajatlarni kamaytirish va mahsulot sifatini oshirish mumkin. Ushbu tendentsiya Sanoat 4.0 deb nomlanadi va to'rtinchi sanoat inqilobidir. Sanoat 4.0 ga imkon beruvchi asosiy texnologiyalar bu narsalar Interneti (IoT), bulutli hisoblash va tahlil kabi raqamli texnologiyalardir.Yoqilg'i-energetika kompleksi istiqbollarida yangi sharoitlar elektr sanoati innovatchiyalari kirib kelmoqda, bunday islohot sifatida, innovation-sanoat, bunday islohot sifatida, ekologik muammolar, ortib talablar muammolar, texnologik va institutsional uchun talablarni oshirish yoki texnologik va institutsional sifatida sanoatning ishonchliligi sanoatning ishonchliligi ko'pgina rivojlangan mamlakatlarda tizimlarning ishonchliligini, ko'pgina rivojlangan mamlakatlarda tizimlarning ishonchliligini, innovatsion tashkilot - egasi asosida hokimiyatni modernizatsiya qilishga o'tishni modernizatsiya qilishga o'tishni aniqlanadi "aqlli energiya tarmoqlari" yoki "aqlli ng a "aqlli energiya tarmoqlari" yoki "aqlli panjara" qurish texnologik platforma mavjud [1-3]. Bugungi kunda Smart tizimi atamasi hali ham umumiy emas Smart tizim atamasi hali ham umumiy qabul qilingan talqin emas. O'zbek tilida bunday tizimning yaratilishi zarurayati katta ahamiaytga ega. Misol strukturaviy vazifalarni tarkibiy oplikatsiya qilish vazifalarining murakkablashishi va boshqarish-islohot sharoitida elektr energetikasida innovatcion islohot komir sanoatiga rivojlanishiga innobatga olmoqdamiz, energiya xizmatlariga bo'lgan talabning o'sishi ularning sifat va miqdoriy shakli, jamiyatning atrof - muhitga bo'lgan yangi talablari-jamiyatning ekologik, ijtimoiy va institutsional energiya shakliga talab kopaymoqda [1-2]. Yoqilg'i uchun yangi talablar mavjud bu erda yoqilg'i uchun tashkiliy energiya balansi elektr sanoatining tuzilishi, elektr sanoatining takomillashtirilishi, tizimlararo tizimni optimallashtirish uchun komir sanaotinig bazasini va o'zgaruvchan turlarini aniqlaydi, bu esa o'z navbatida belgilaydi faol-moslashuvchan tarmoqni rivojlantirish zarurati bor va faol-moslashuvchan tarmoqni (uzatish va tarqatish) ishlab chiqishi kerak (uzatish va tarqatish elektr uzatish liniyalari va avtomatlashtirilgan boshqaruv tizimlari) avtomatlashtirilgan boshqaruv tizimlari zarur albatta rivojlangan mamlakatlardan namunalar olsak boladi. Misol bizlar tomondan ilmiy ishimizda to'rtinchi sanoat inqilobining zarurligini ishlab chiqarish jarayoniga bir qator texnologiyalarni joriy qilishni o'z ichiga oladi. Ushbu texnologiyalar ilg'or robototexnikadan qo'shimcha ishlab chiqarishgacha bo'lishi mumkin. Dasturga kiritilgan boshqa texnologiyalarga kengaytirilgan reallik va simulyatsiya, bulut va kiberxavfsizlik hamda robotlar kiradi. Zamonaviy innovatchion yangi texnologiyalar sanoat korxonalarga ishlab chiqarish jarayonlarini avtomatlashtirish imkonini berishi mumkuni. Bunda tizimlarni kuchliroq qilishlari va bo'limlar o'rtasidagi hamkorlikni rag'batlantirishlari mumkin. Industry 4.0 orqali ma'lumotlar tahlilidan foydalanish odamlarga aqlliroq qarorlar qabul qilishga va muammolarni katta bo'lishidan oldin oldini olishga yordam beradi. Sanoat korhonalarini va kompaniyalar real vaqt rejimidagi ma'lumotlar va internetga ulangan mexanizmlardan foydalangan holda faolroq bo'lishlari kuzatiladi amaliyotda. Industry 4.0 tizimida mahsulotlarning butun hayot aylanish jarayonida sodir bo'ladigan ishlab chiqarish evolyutsiyasini ifodalash uchun ishlatilishi mumkun. Sanaotning ishlab chiqarish va ta'minot zanjiri va qiymat zanjirini o'z ichiga oladi. Industry 4.0 hozirga zamon talabiga asosan ko'plab manfaatdor tomonlarga katta sanoat rahbarlariga ishni boshqarish mehanizimiga ustunligi imkoniyatlarini oshishini kutishadi va ularning kutishlari

butun ta'minot zanjiriga katta ta'sir ko'rsatadi. Industry 4.0 ning asosiy komponentlari kiberfizik tizimlardir va iqtisodiy raqamlashtirish, kiber-fizik tizimlar tarmoqlar orqali ulangan turli xil aqlli komponentlardan iborat tarzdi bosqariladi. Sanoat korhonalarida ishlab chiqarish, jumladan, masofadan boshqarish, aqlli zavodlar va logistika sohasida yangi imkoniyatlarni bor. Zamonaviy texnologiyalardan foydalanish yoqilg‘i-energetika majmuasida ishlab chiqarish sanoat korhonalariga va kompaniyalarga xarajatlarni kamaytirish bilan birga jarayonlarni optimallashtirish imkonini beradi. Ilmiya izlanish jarayonida bizlar smart tiizmini inobatga olganbiz va Smart tizim - bu tarmoq uchun asosdir - energiyaning kontseptual modeli uchun asos bo'lib, natijada energiyaning optimal modeliga olib keladi [4-7]. Kelajakda keyingi innovatichion natijasida ishlanmalar rivojlanishlarga raqamlashtirish zaruruiyatlari seziladi. “Aqlli tizimi”, xarakterli “aqlli energiya potencial”ni yaratish, axborotning yuqori darajasi bilan ajralib turadigan, “raqamlilashtirilgan” birlik yaratish qaratilmoqda mavzu va ilmiy ishlarimiz shu komir sanaoti rivojlanishiga va ma'lumotlarning yuqori darajasi, avtomatlashtirish va interaktivni "raqamlashtirish", avtomatlashtirishning qattiq ionli va interaktiv, qattiq o'lchov integratsiyasi, axborot va o'lchov integratsiyasi, axborot va energetika tizimida aloqa hosil qilish, kompyuter va boshqaruv texnikasi va texnologiyalari Smart tizimini komir sanaotiga jalb qilishda qisqa muddatda yaratilishi komir qazib olish muhitining samarali rag'batlantiradi, masalan, o'zaro bog'liq tarmoqlarning rivojlanishini samarali vaqt tejamkorligi bilinadi. “aqlli hisoblagichlar” ishlab chiqarish, “aqlli hisoblagichlar” ishlab chiqarish, raqamli transformator podstansiyalarining raqamli transformator podstansiyasini yaratish, tizimli integratsiya, tehnologik integrachion harakatlarni ishlab chiqish, tizim integratsiyasi ishlab chiqish zarur. Bugungi zamon talablarida Sanoat 4 salohiyatidagi iqtisodiy rivojlanishning va modernizatsiya ko‘rinishlari, ularni joriy etish bosqichlari va natijalarini realizatsiya qilish doirasida ko‘rsatilgan faoliyat yo‘nalishlari asosida iqtisodiy rivojlanishning amalga oshirishning muhim tavsifi ishlatilmoqda va “O‘zbekko‘mir” aksiyadorlik jamiyatining zamonaviy elktron qurilmalar va kompyuterlar bilan jihozlash zarur. Ummumiy talablar assosdia o'lchov tizimlari va sug'urta tizimlari sanoati va sanoat muqobil energiya manbalari oz aksini korsatmoqda “Aqlli tizim”ni yaratishda “aqlli tarmoq”ni yaratishda, asosan kompuyter sohalarga e’tibor qaratiladi [3-5]. Xavfsizlig va barqaror ish va elektr energiyasining barqaror ishlashi taminlab tizimni va, energiya tizimlarining ishonchliligini oshirish, quvvatning ishonchliligini oshirish ta'minlash tadbirlari, kompyuterlashtirish, ning “intellektual” tizimini nazorati yaratish, funksional nazoratni oshirish, boshqaruvning funksionalligini oshirish, nazoratning ishonchliligiga zamin yaratdi, “aqlli tarmoqlari”ni qurish. "aqlli energiya tarmoqlarini" yaratish. Investitsiyalarni rivojlantirishga eyonaltirilsa va kelajakdagi energiya investitsiyalarining ushbu innovatsion rivojlanishining bir qismi bo'lishi mumkin [3]. Bizlar tomondan ilmiy ishimizda malum boldiki muhim o'zgarishlar orasida iqtisodga ta'sir qiluvchi xususan energetikada va komir sanoati, chet el olimlari va xorijiy olimlar va tadqiqotchilar quyidagilarni o'z ichiga olganlar [2-6].
1. Yoqilg‘i-energetika majmuasida ishlab chiqarish sanoat korhonalariga va

kompaniyalarga elektr quvvat manbalarining etishmasligi va elektr energiya manbalari bilimi malumotlar kamligi. 2.Elektr quvvat manbalariga tobora ortib borayotgan talablar. Doimiy ortib borayotgan talablar elektr energiyasiga va sifati elektr energiyasi iste'molchilar tomonidan talab qilinmoqda. 3. Narxlarning doimiy o'sishi davom etilmoqa. 4. Komir sanoatida tanqislik energetika sohasida malakali ishchilar etishmasligi. 5. Qoshni mamlakarlarda Energiya kompaniyalari manfaatdor tomonlarning talablarining ortishi. 6. Ekologik talablar va elektr stantsiyalarining sanoat xavfsizligi logistika susutligi. 7. Tizim bo'ylab xarajatlarni kamaytirish. Hulosada ixtisoslashgan komir qazib olish sanoatiga: a). “Aqlli” elektr energiyasi ishlab chiqarish, b)."Aqlli" elektr uzatish, v). Elektrni “aqlli” konvertatsiya qilish joriy, dolzarbligi asoslanib g). "Aqlli" kuch misol qilinib Axborot texnologiyalari roliga asoslangan “Smart” masofaviy monitoring va boshqarish, axborot texnologiyalari asosida. Bularni Aqlli energiya tarmoqlarini rivojlantirishda o‘rganish bo‘yicha yondashuvlarni xorijiy davlatlar haqida xulosa qilish mumkin va ulardagi tizimli yondashuv mavjud, dasturlarini amaliy amalga oshirish dasturlarini amaliy energiya samaradorligini oshirish va davlat darajasida energiya samaradorligini oshirishi korsatilgan [8-10]. Bizni fikrimizcha, biz energiya samaradorligini oshirishga O'zbekiston energetika sanoatining energiya samaradorligini oshirish kerak va loyihalarni amalga oshirish nuqtasida innovatchion loyihalarni amalga oshirish bojlarini energiya tizimi ta'minlash va innovatsion, kompleks yondashuvni ta'minlash, energiyaga kompleks yondashuv yangi avlod korxonasini ishlab chiqish va ishlab chiqarishni o'z ichiga olgan rivojlanishni modernizatsiya va uskunalarni ishlab chiqarish kerak [9]. Hitoy Amerika Indiya malakaviy tajriba oshirishga eyosh kaderlani oqishga yuborilishi lozim. Istiqbolda respublika yoqilg‘i-energetika balansida ko‘mir ulushining ortib borishi ko‘mir sanoatini o‘rta va uzoq muddatli rivojlantirishning inersion va faol variantlaridan foydalangan holda tarmoqning iqtisodiy rivojlanishiga ham turtki beradi. Tayyorlangan iqtisodiy ma’lumotlarning sifati boshqaruv axborot tizimining yagona axborot davri sifatida samaradorligini belgilaydi, uning maqsadi samarali boshqaruv qarorlarini qabul qilishni ta’minlash uchun axborot va texnik va texnologik muhitni yaratishdir va bularni Angren ko‘mir koni, Sharg‘un ko‘mir koni, Boysun toshko‘mir koni ishlatilishiga ilmiy ishlarimizda misolar keltirilgan. Xulosa qilib aytganda O'zbekiston tabiiy boyliklardan, xususan yoqilg'i sanoati muhim hisoblangan neft, gaz va ko'mirdan yanada to'laroq va samarali foydalanish respublikaning ishlab chiqarish ixtisosi doirasini ancha kengaytirishga, butun xalq xo'jalik kompleksini rivojlantirishga uning umumiy iqtisodiy taqsimotidagi hissasini oshirishga imkon yaratdi.

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INNOVATIVE TECHNOLOGIES IN FOREIGN LANGUAGE TEACHING IN TECHNICAL HIGHER EDUCATIONAL INSTITUTIONS

Abstract: *The current state and prospects for the teaching foreign languages the development of oral competence of students of higher philological education, the principles of a credit-modular system of universities based on advanced foreign experience, recognition of learning outcomes. Substantiated is academic mobility, the accumulation of grades, the interest of teachers and students in science, as well as the introduction of a well defined assessment system.*

Key words: *Pragmatic, Pedagogical Features, Higher Education, Methods Of Teaching Foreign languages, Modern Teaching Requirements, Assignments, Speaking Competence.*

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TEXNIK OLIY O'QUV YURTLARIDA CHET TILLARINI O'QITISHDA INNOVATSION TEXNOLOGIYALAR

Annotatsiya: *Xorijiy tillarni o‘qitishning hozirgi holati va istiqbollari Oliy filologiya ta’lim yo‘nalishi talabalarining og‘zaki nutqi kompetensiyasini rivojlantirish, ilg‘or xorijiy tajribaga asoslangan universitetlarning kredit-modul tizimi tamoyillari, o‘quv natijalarini e’tirof etish. Akademik harakatchanlik, baholarning to'planishi, o'qituvchilar va talabalarning fanga qiziqishi, shuningdek, aniq belgilangan baholash tizimining joriy etilishi asoslanadi.*

Tayanch so'zlar: *Pragmatik, Pedagogik xususiyatlar, Oliy ta'lim, Chet tillarini o'qitish metodikasi, O'qitishning zamonaviy talablari, Topshiriqlar, Nutq kompetensiyasi.*

The methodology of teaching the native language in linguistics is based on a didactic, pragmatic approach, the development of linguistic competencies in the course of the lesson is intended to lead to the development of linguo-didactical competencies. Skills (listening comprehension), (speaking), (reading) and (writing) are developed through specific requirements for language learning based on international experience. We think it is a good idea to use this approach a little more creatively in mother tongue teaching. This is because students come to the university as speakers of the language with certain speaking skills and abilities. Students develop only some skills in their native language (because they are native speakers), mainly to improve their linguo-didactical skills, especially teachers of Uzbek language and literature can understand and read a text or conversation in their native language , can speak and write. In this case, the didactic task of mother tongue teaching methods is to improve students' ability to understand what they hear, to speak fluently and logically in literary language, to read and understand the text, and to write correctly and meaningfully.

In the study of the activities of universities ranked high in international rankings, the development of curricula in line with modern and world requirements, the introduction of modern information and communication technologies in higher philological education, the essence of the credit-modular system of education. 1. Availability of a database to be reflected in the catalog of the educational program. 2. Creating a science catalog. 3. Monitoring of information to be reflected in the agreement on education. 4. Statistical analysis, which should be reflected in the reference book on education. Looking at the analysis of the current situation, the compatibility of each educational direction and specialty with the curriculum, science program, textbooks and literature with modern requirements and international standards was studied. In the QS Rankings and THE rankings on the basis of 24 directions and 28 specialties, the TOP 300 universities were compared with the disciplines in the corresponding fields. As a result of the study, it was found that some disciplines overlap in content, do not meet modern requirements and international standards. It was found that old textbooks and textbooks were used in the teaching of some subjects. In order to solve the problems, the ECTS system was studied, the experience of local and foreign universities in the credit-module system was studied, and the ECTS (European Credit Transfer System) system was chosen. “El-Yurt Umidi Foundation”, in cooperation with the Republican Higher Education Council, organizes several seminars on the ECTS credit-module system in philological higher education institutions of the Republic of Uzbekistan, master classes on the system were held. The methodology of language teaching in developed countries is explained by a number of achievements in recent years. As a result, certain developments and reforms are taking place in the socio-economic spheres of society. After all, language as a means of communication affects the development of all areas, so the issue of its linguo-didactic teaching is always relevant. Today, most countries are making good use of the achievements of English language teaching, which is a model for world language teaching methods.

Observations show that the development of speaking skills in international language teaching methods is a key issue, and its implementation depends more on the quality of teaching tasks. It is known from international experience that the modular-credit system has a number of advantages. In this case, the fact that teaching a student, directing him to work independently, is very much in line with modern requirements. The independent, learning assignments used in practice are developed based on pre-defined criteria. Why switch to a credit-module system? Although several articles have been published on the purpose, nature and benefits, and how the Credit Module system facilitates student service or “registrar office opportunities”, we still face this problem because we do not know the traditional. Because we are accustomed to the process. The problem of literature is the formation of a list of foreign literature for new science programs (syllabuses) and the gradual acquisition of foreign literature. This responsible task can, of course, be accomplished through improved learning assignments. In this sense, the issue of improving the linguistic and didactic basis of the credit-module system in the development of educational tasks, independent of the native language in philological education is very important. Thus, the work on the creation of textbooks and manuals in the native language methodology on the basis of foreign literature in the creditmodule system, the establishment of English groups for first-year students in the 2020-2021 academic year, Voluntary admission of students with IELTS, TOEFL, CEFR, etc. who have sufficient knowledge of English to English groups is an opportunity created by the New Uzbekistan for young people. As of 2022, the total number of first-year undergraduate students is 1,803, of whom 394 have been found eligible to study in the English group and have been approved. This is 22% of the total number of students. It is important to provide students with new literature for their study, as well as to create conditions for students to work independently, to create opportunities for online access to foreign libraries. Expanding the capacity of lecture halls. It is required to abolish the restrictions on student participation in lectures, in particular, the ability of students to listen to the lectures of the desired professor, an additional increase in the monthly salary of a professor, the computerization of the educational process.

In conclusion, it should be noted that the basis of the lesson, which nurtures creative thinking, are the learning tasks that focus on thinking. The general requirements that such a modern course must meet are: 1. To organize the educational process on the basis of questions and answers, using the latest scientific achievements, the best pedagogical practices. 2. Organize the lesson with appropriate and purposeful use of learning tasks. 3. Create all the necessary conditions for students' learning activities, develop assignments on the text or topic, taking into account their interests, inclinations and needs. 4. Consider interdisciplinary connections when creating questions and assignments. Grammar is not a rule, it is a transition to working with a text in the native language, creating a system of questions and assignments that lead to understanding the meaning, pronunciation and spelling of words in the text, what the author actually means, the love of literature sees the height of the mother tongue. Grammar theories are stereotypes that the mother tongue does not fit. We need to show the speech potential of a language, which is not measured by grammar. This means that each lesson aims to achieve three goals: teaching, educating, and developing. Mother tongue education is mainly concerned with the development of grammatical knowledge. We have turned language learning into a complex process, such as skills are a separate issue, why the knowledge of mother tongue teachers is underestimated because we are measuring incorrectly. A university teacher is not required to have the knowledge and skills of a linguist in science, in fact, scientists know only a small area of linguistics. Requires the teacher to know the methodological field of linguistics.

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NOSIMMETRIK UCH FAZALI O'ZGARUVCHAN TOK SISTEMASINI MULTISIM DASTURIDA HISOBLASH

Annotatsiya: *Ushbu maqolada nosimmetrik uch fazali tok zanjirining istemolchilardagi quvvat va kuchlanishlar taqsimoti Multisim modellashtirish dasturida loyihalangan va simulyatsiya qilingan. "Yulduz" sxemada ulangan aktiv iste'molchilar uchun neytral simning ahamiyati ko'rsatib berilgan.*
Kalit so'zlar: *aktiv iste'molchi, kuchlanishlar taqsimoti, Multisim modellashtirish dasturi, nosimmetrik uch fazali tok, simulyatsiya.*

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CALCULATION OF AN UNBALANCED THREE-PHASE AC SYSTEM IN THE MULTISIM SOFTWARE

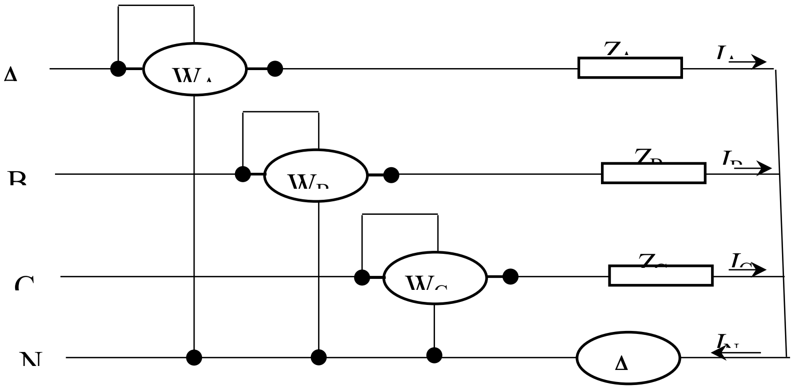
Annotation: *In this article, the distribution of power and voltages in consumers of a symmetrical three-phase current circuit is designed and simulated in the Multisim modelling program. The importance of the neutral wire for active consumers connected in the "a star" scheme is shown.*
Keywords: *active consumer, voltage distribution, Multisim modelling program, symmetrical three-phase current, simulation.*

Hozirgi kunda xalq xo'jaligi, aholi xonadonlari va ishlab chiqarish korxonalarini elektr energiyasi bilan ta'minlashda energiyatejamkor texnologiyalarni qo'llash orqali energiyani tejash masalalari kun tartibidagi dolzarb masalalardan biri hisoblanmoqda. Bunday muammolarni hal qilishda elektr energiyasi ta'minoti muhandislaridan reaktiv quvvat kompensatorlarini o'rnatish bilan bir qatorda elektr energiyasi iste'molchilarini ulanish sxemalarini to'g'ri tanlash va nosimmetrik zanjir sxemalarini tushsunish va ularni tahlil qila olish ko'nikmalari shakllangan bo'lishi talab etiladi [1].

Elektron hisoblar mashinalari yangi avlodlarining yaratilishi va takomillashib borishi kompyuter dasturlari yordamida elektr zanjir sxemalarini loyihalash va uni simulyatsiya qilish imkoniyatlarini kengaytirmoqda. Shunday simulyator dasturlar qatoriga AQSH ning National Instruments kompaniyasi tomonidan ishlab chiqilgan “Multisim” dasturini keltirish mumkin. Ushbu maqola “yulduz” sxemada ulangan iste’molchilar uch fazali nosimmetrik o’zgaruvchan tok sistemasini Multisim dasturida loyihalash orqali kuchlanish quvvat va tok munosabatlarini tahlil qilishga bag’ishlangan [2-6].

Bir fazali tok zanjiridagi kabi nagruzka simmetrik va nosimmetrik bo‘lganda “yulduz” usulida ulangan iste’molchilarning aktiv, reaktiv va to‘la quvvat tushunchalari uch fazali tok zanjirida ham o‘z ma’nosini to‘la saqlaydi [7-8]. Nagruzka nosimmetrik bo‘lganda har bir fazaning quvvati alohida hisoblab topiladi.

1-rasmda “yulduz” sxemada ulangan uch fazali iste’molchilarning aktiv quvvati va neytral simdagi tok kuchini o’lchash sxemasi keltirilgan.



1-rasm. To'rt simli uch fazali zanjirda har bir fazadagi aktiv quvvatni o'lchash sxemasi.

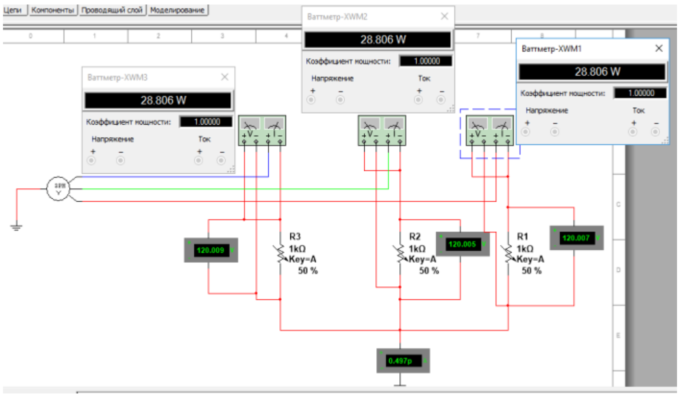
Iste’molchilar yulduz usulida ulanganda nosimmetrik zanjir uchun ($I_A \neq I_B \neq I_C$):

$$P_A = U_A I_A \cos\varphi_A , \quad P_B = U_B I_B \cos\varphi_B , \quad P_C = U_C I_C \cos\varphi_C .$$

Uch fazali zanjirining aktiv quvvati alohida fazalar aktiv quvvatlarining yig‘indisiga teng, ya’ni:

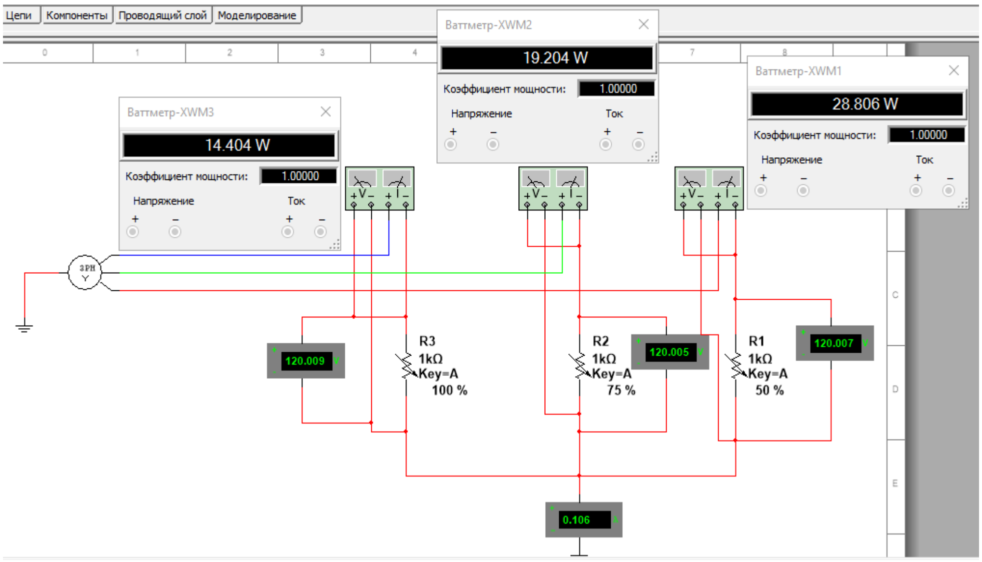
$$P_{um} = P_A + P_B + P_C.$$

2-rasmda “yulduz” usulida ulangan simmetrik uch fazali tok sistemasini Multisim dasturida tekshirish sxemasi va olingan natijalar ko’rsatilgan. Bunda 120 V faza kuchlanishli, 60 Gs chastotali uch fazali o’zgarivchan tok manbaining har bir fazasiga 1 kOm qarshilikka ega reostat iste’molchi sifatida ulangan. Rasmda ko’rsatilgan holatda har bir fazada qarshilik 500 Om ga (50%) teng bo’lganda fazalarga ulangan barcha vatmetr va voltmetrlarning ko’rsatishi bir xil, ya’ni 28.806 Vt va 120 V qiymatni ko’rsatmoqda. Shuningdek, neytal simga ulangan ampermetr 0.497 pA tok kuchini ko’rsatmoqda. Bu neytral simdan deyarli tok oqmayotganini bildiradi.



2-rasm. Multisim dasturida “yulduz” usulida ulangan simmetrik uch fazali tok sistemasini tekshirish sxemasi.

Endi nosimmetrik elektr zanjiri uchun yuqoridagi tajribani o’tkazamiz. 3-rasmda “yulduz” usulida ulangan nosimmetrik uch fazali tok sistemasini Multisim dasturida tekshirish sxemasi va olingan natijalar ko’rsatilgan. Bunda 120 V faza kuchlanishli, 60 Gs chastotali uch fazali o’zgarivchan tok manbaining har bir fazasiga ulangan reostat uch xil R_1=500 Om (50%), R_2=750 Om (75%), R_3=1 kOm (100%) qarshilikka ega iste’molchi sifatida ulangan. Ushbu holatda fazalarga ulangan vatmetrlarning ko’rsatishi 28.806 Vt, 19.204 Vt va 14.404 Vt ni ko’rsatmoqda, ya’ni fazalarda turlicha quvvat istemoli kuzatilmoqda. Lekin barcha fazalardagi kuchlanish bir xil bo’lib, yana 120 V qiymatni ko’rsatmoqda. Shuningdek, neytal simga ulangan ampermetr endi 0.106 A tok kuchini ko’rsatmoqda. Bu sezilarli darajadagi tok bo’lib, neytral simdan tok oqayotganini bildiradi.



3-rasm. Multisim dasturida “yulduz” usulida ulangan nosimmetrik uch fazali tok sistemasini tekshirish sxemasi.

Yuqorida o’tkazilgan tajribalardan shunday xulosa qilish mumkinki, fazalardagi yuklamalr har xil bo‘lganda nol simda siljish kuchlanishi paydo bo‘ladi (fazalardagi kuchlanishlarning yig‘indisi noldan farqli). Bu kuchlanishning fazalarga qayta taqsimlanishi natijasida ayrim fazada kuchlanish ortib ketadi, ba’zi fazada kamayib ketadi. Albatta bu elektr iste’molchilar ishiga salbiy tasir ko‘rsatadi.

Shuning uchun, nolinchi sim orqali kuchlanish yana generatorga qaytarib yuboriladi va fazalardagi kuchlanishlar taqsimoti bir xilligi ta'minlanadi.

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DEVELOPING A PERSONALIZED EDUCATIONAL TRAJECTORY FOR TEACHING SPECIALIZED ECONOMICS SUBJECTS: A METHODOLOGICAL FRAMEWORK

Abstract:*The increasing demand for specialized knowledge in economics necessitates the development of personalized educational trajectories tailored to individual learners. This research proposes a methodological framework for designing and implementing personalized learning paths in teaching specialized economics subjects. The study combines insights from educational psychology, learning analytics, and pedagogy to create a learner-centered approach that enhances engagement and outcomes. The proposed framework integrates adaptive learning technologies, competency-based assessment, and modular content delivery to align with students' diverse learning needs, prior knowledge, and career aspirations. It employs machine learning algorithms to analyze learners' progress and preferences, providing real-time feedback and adjusting educational content accordingly. Additionally, the framework emphasizes the role of experiential learning, enabling students to apply theoretical knowledge to practical economic challenges through simulations and case studies. The study also addresses the critical role of instructor support and collaborative learning environments in fostering deeper understanding and motivation. The framework is evaluated through pilot studies in university settings, demonstrating its potential to enhance learner performance, reduce dropout rates, and prepare students for dynamic economic landscapes. This paper contributes to the growing discourse on personalized education by offering a scalable, evidence-based model tailored to the complexities of specialized economics education.*

Keywords: *Personalized learning, educational trajectory, specialized economics education, methodological framework, adaptive learning technologies, competency-based assessment, modular content delivery, experiential learning.*

Introduction

The rapid advancements in economic theory and practice necessitate a transformation in how specialized economics subjects are taught in higher education. Traditional, one-size-fits-all approaches to curriculum design often fail to address the diverse needs, learning styles, and career aspirations of modern learners (Jones & Smith, 2021). Personalized educational trajectories offer a promising solution, aligning the teaching process with individual learner profiles while leveraging technological advancements such as adaptive learning systems and data-driven insights (Dabbagh & Kitsantas, 2012). As global economic landscapes evolve, the demand for professionals equipped with both theoretical and practical expertise grows, underscoring the need for innovative educational methodologies.

This study aims to explore how personalized learning models can be effectively applied to teaching specialized economics subjects.

The research problem centers on the lack of an evidence-based, scalable framework for implementing personalized learning in economics education. While significant research exists on personalized learning in general (Siemens, 2013), there is limited work focused specifically on its application in complex, specialized fields like economics. Economics students often face challenges in understanding abstract theories and their real-world applications, which contributes to disengagement and suboptimal learning outcomes (Lee et al., 2020). A methodological framework that incorporates adaptive technologies, modular content, and competency-based assessment could bridge this gap. This study seeks to address this pressing issue by proposing a structured, systematic approach to personalized economics education.

The importance of this research lies in its potential to enhance student learning outcomes and readiness for professional economic challenges. Personalized educational trajectories empower students to take ownership of their learning while enabling instructors to deliver more targeted and effective teaching strategies (Park & Jo, 2019). Moreover, the integration of experiential learning activities, such as case studies and simulations, helps students develop critical thinking and problem-solving skills essential for addressing real-world economic issues. By leveraging machine learning and data analytics, the proposed framework also provides real-time feedback and fosters continuous improvement (Baker & Inventado, 2014). Thus, this research contributes not only to improving economics education but also to broader educational innovation.

To achieve these goals, the study employs a mixed-methods approach that aligns with the IMRAD (Introduction, Methods, Results, and Discussion) structure. The methodological framework is developed based on a comprehensive review of existing literature, pilot implementations, and expert consultations. Data collected from pilot studies are analyzed using both qualitative and quantitative techniques to evaluate the framework's effectiveness in enhancing learning outcomes. Preliminary results suggest that personalized learning strategies significantly improve student engagement, knowledge retention, and practical skills application (Chen et al., 2021). These findings provide a foundation for discussing the broader implications of personalized learning in higher education and proposing recommendations for its scalable implementation in economics programs.

In summary, this paper addresses a critical gap in specialized economics education by presenting a methodological framework for developing personalized educational trajectories. It builds on prior research in personalized learning, adaptive technologies, and pedagogical innovation while addressing the unique challenges of teaching economics. By providing a structured approach, the framework offers practical insights for educators, policymakers, and institutions seeking to enhance student learning outcomes in specialized fields. This research ultimately aims to foster a learner-centered paradigm that equips students with the knowledge and skills needed to thrive in a rapidly changing economic environment.

Literature Review

Personalized Learning: Definitions and Foundations

Personalized learning has emerged as a transformative approach to education, emphasizing individualized learning paths based on students' unique needs, interests, and goals. Researchers argue that this approach is grounded in the principles of constructivism, which views learning as an active, individualized process shaped by prior knowledge and experiences (Siemens, 2013). The integration of adaptive technologies into personalized learning has further enabled real-time customization of content, pacing, and assessment (Dabbagh & Kitsantas, 2012). These technologies facilitate deeper engagement by aligning educational trajectories with student competencies and aspirations. Despite its growing popularity, scholars critique the lack of a unified theoretical framework for implementing personalized learning effectively, particularly in specialized disciplines such as economics (Park & Jo, 2019).

Existing literature highlights several critical components of personalized learning, including competency-based progression, learner agency, and data-driven insights. Competency-based learning ensures students progress only when they demonstrate mastery of a subject, a concept supported by empirical studies showing improved learning outcomes (Lee et al., 2020). Furthermore, promoting learner agency through goal-setting and self-reflection fosters intrinsic motivation, which is essential for success in self-directed learning environments (Chen et al., 2021). However, researchers emphasize the need to address equity concerns, as access to adaptive technologies and personalized resources may vary significantly across institutions and demographics (Jones & Smith, 2021).

Adaptive Learning Technologies in Higher Education

Adaptive learning technologies, which leverage artificial intelligence and machine learning, have revolutionized personalized education in recent years. These systems analyze real-time learner data to adjust content delivery, recommend resources, and provide individualized feedback (Baker & Inventado, 2014). In economics education, adaptive tools have shown promise in helping students grasp abstract theories and apply them to real-world problems. For example, digital platforms offering interactive simulations and personalized practice exercises have significantly improved learners' comprehension and problem-solving abilities (Chen et al., 2021). Despite these advancements, questions remain about the scalability and effectiveness of adaptive systems in complex, highly specialized fields.

Critics argue that most adaptive learning tools are designed for general education rather than specialized disciplines such as economics. These tools often fail to address the nuanced requirements of complex subjects, such as understanding the interplay between theoretical models and practical economic applications (Siemens, 2013). Moreover, the reliance on algorithmic decision-making raises ethical concerns, including potential biases in content recommendations and assessment (Jones & Smith, 2021). To advance the field, researchers call for interdisciplinary collaborations between educators, economists, and technologists to develop adaptive systems tailored to the unique demands of specialized subjects (Lee et al., 2020).

Competency-Based Education and Economics

Competency-based education (CBE) emphasizes mastery over rigid adherence to standardized learning timelines. In economics education, this approach aligns well with the need for students to achieve specific skill sets, such as quantitative analysis and critical reasoning, before progressing to advanced topics (Park & Jo, 2019). Studies indicate that CBE improves student outcomes by allowing learners to focus on areas where they need the most support, thus optimizing the learning process (Dabbagh & Kitsantas, 2012). By fostering mastery, CBE helps students build confidence and competence, which are essential for tackling the complexities of specialized economic concepts.

Despite its benefits, implementing CBE in economics education poses significant challenges. One key limitation is the difficulty of developing assessments that accurately measure competencies in abstract and theoretical subjects (Lee et al., 2020). Additionally, the emphasis on individual progression may undermine collaborative learning opportunities, which are crucial for understanding interconnected economic phenomena (Jones & Smith, 2021). Addressing these issues requires a balanced approach that integrates CBE principles with opportunities for peer interaction and practical application, ensuring holistic learning experiences.

Modular Content Delivery for Specialized Subjects

Modular content delivery divides educational material into self-contained units, enabling flexibility in curriculum design and personalized learning pathways. This approach has been particularly effective in specialized fields, where students can select modules that align with their interests and career goals (Chen et al., 2021). For example, in economics education, modular courses on topics such as game theory, behavioral economics, or macroeconomic policy allow learners to tailor their trajectories while building a comprehensive understanding of the discipline. Research indicates that modular delivery enhances engagement and retention, as students are more likely to stay motivated when pursuing topics relevant to their aspirations (Siemens, 2013).

However, modular content delivery also has limitations, particularly in maintaining coherence across modules. Critics argue that fragmented learning experiences may lead to gaps in foundational knowledge, which are particularly detrimental in fields like economics that require a strong theoretical base (Jones & Smith, 2021). To mitigate this risk, scholars recommend designing modules that are interlinked through a cohesive framework, ensuring students acquire both depth and breadth of knowledge (Lee et al., 2020). Furthermore, integrating experiential learning opportunities within modules can help bridge theory and practice, enhancing the relevance and applicability of economics education.

Experiential Learning and Economics Education

Experiential learning, which emphasizes hands-on, real-world applications, has gained traction as a critical component of personalized education. In economics, experiential learning methods such as case studies, simulations, and internships enable students to apply theoretical knowledge to practical challenges, fostering deeper understanding and skill development (Baker & Inventado, 2014). For instance, simulated economic models allow learners to experiment with policy decisions and observe their impacts, bridging the gap between abstract concepts and real-world applications. Research highlights that students engaged in experiential learning report higher levels of engagement, satisfaction, and academic achievement (Chen et al., 2021).

While the benefits of experiential learning are well-documented, integrating these methods into personalized educational trajectories presents challenges. Developing and scaling high-quality experiential learning opportunities require significant resources, including time, funding, and access to industry partnerships (Park & Jo, 2019). Additionally, instructors must be equipped to facilitate these experiences effectively, which may necessitate specialized training (Lee et al., 2020). Despite these challenges, experiential learning remains a vital component of personalized economics education, providing students with the skills and confidence needed to navigate complex economic landscapes.

Critiques and Gaps in Current Theoretical Frameworks

Although the literature on personalized learning has grown substantially, significant gaps remain in its application to specialized economics education. Existing theoretical frameworks often lack the granularity required to address the unique challenges of teaching complex subjects, such as the interplay between abstract theories and practical skills (Jones & Smith, 2021). Moreover, the overemphasis on technology in personalized learning risks neglecting the critical role of human instructors in shaping meaningful educational experiences (Dabbagh & Kitsantas, 2012). These gaps highlight the need for a more comprehensive, integrative framework that combines adaptive technologies with pedagogical innovation and experiential learning.

This study aims to address these gaps by proposing a methodological framework that synthesizes insights from personalized learning, competency-based education, and modular content delivery. By critiquing existing models and incorporating interdisciplinary perspectives, the framework seeks to advance theoretical and practical understanding in economics education. Furthermore, the study emphasizes scalability and equity, ensuring the proposed framework can be implemented effectively across diverse educational contexts. This contribution aligns with calls for more robust, evidence-based approaches to personalized learning in specialized disciplines (Siemens, 2013; Chen et al., 2021).

Discussion

The findings of this study highlight the potential of a methodological framework for personalized educational trajectories in specialized economics education. By integrating adaptive technologies, competency-based education, and modular content delivery, the framework addresses the unique challenges of teaching complex and abstract economic concepts. Adaptive systems allow for real-time adjustments to curriculum delivery, ensuring students receive targeted support tailored to their individual needs. These findings align with prior research demonstrating that personalized learning enhances engagement and knowledge retention (Chen et al., 2021). However, the study also underscores the importance of contextualizing adaptive technologies within a robust pedagogical structure to ensure coherence and depth in students' learning experiences.

One critical insight from this study is the importance of experiential learning in bridging theoretical knowledge and practical application. Simulations, case studies, and internships provide students with hands-on opportunities to apply economic theories to real-world problems, fostering deeper understanding and skill development. These experiential approaches are particularly valuable in specialized fields, where practical competence is essential for professional success. However, implementing experiential learning at scale presents logistical and financial challenges, especially in resource-constrained educational environments (Park & Jo, 2019). Institutions must invest in faculty training and industry partnerships to ensure the sustainability and effectiveness of such initiatives.

Another significant contribution of this research is its focus on competency-based assessment, which enables students to progress based on demonstrated mastery rather than rigid timelines. This approach not only fosters personalized learning but also empowers students to take ownership of their educational trajectories. However, the study reveals that designing effective competency-based assessments in economics is complex, given the abstract and interconnected nature of the subject matter (Lee et al., 2020). Future research should explore innovative assessment strategies, such as portfolio evaluations and performance-based tasks, that capture the multifaceted competencies required in economics.

The study also highlights the challenges of ensuring equity and accessibility in personalized education. While adaptive technologies and modular content offer significant advantages, they risk exacerbating inequalities if access to these resources is not evenly distributed (Jones & Smith, 2021). Educational institutions must prioritize inclusivity by providing affordable access to digital tools and addressing potential biases in algorithmic decision-making. Additionally, policymakers should support initiatives that democratize access to personalized learning, ensuring that all students, regardless of socioeconomic background, can benefit from these advancements.

In summary, this research advances the theoretical and practical understanding of personalized learning in specialized economics education. The proposed framework provides a scalable and evidence-based model that integrates adaptive technologies, competency-based education, and experiential learning. While the findings underscore the transformative potential of personalized education, they also highlight areas requiring further exploration, including equity, assessment design, and faculty readiness. By addressing these challenges, educators and institutions can fully realize the potential of personalized educational trajectories, equipping students with the skills and knowledge needed to navigate a rapidly evolving economic landscape.

Conclusion

This study proposes a methodological framework for developing personalized educational trajectories in specialized economics education, addressing critical gaps in traditional teaching approaches. By integrating adaptive learning technologies, competency-based education, and modular content delivery, the framework offers a learner-centered approach that enhances engagement, knowledge retention, and skill development. The emphasis on experiential learning further bridges the gap between abstract economic theories and their practical applications, preparing students for real-world challenges. This study underscores the transformative potential of personalized learning in equipping students with the competencies required for professional success in an evolving economic landscape.

The findings of this research contribute to the theoretical development of personalized education by offering a structured model tailored to the unique demands of specialized disciplines. This framework not only builds upon existing theories of personalized learning and adaptive technologies but also addresses challenges such as coherence, equity, and scalability. Moreover, the study highlights the importance of competency-based assessment and experiential learning as vital components of a holistic, personalized educational trajectory. These insights serve as a foundation for further exploration and refinement of personalized learning models in higher education.

However, challenges such as access to adaptive technologies, faculty training, and the development of nuanced assessment methods must be addressed for successful implementation. Ensuring equity and inclusivity remains a key priority, as personalized learning systems must be accessible to students from diverse backgrounds to avoid exacerbating existing disparities. Furthermore, interdisciplinary collaboration among educators, policymakers, and technologists will be crucial in designing systems that are effective, ethical, and scalable across diverse educational settings.

In conclusion, this research provides a comprehensive and actionable framework for enhancing economics education through personalized learning. The proposed model offers practical solutions to the challenges of teaching specialized subjects, fostering a more engaging and effective learning experience for students. By addressing the highlighted challenges, educators and institutions can implement innovative teaching strategies that not only improve academic outcomes but also equip students with the critical thinking and problem-solving skills needed to thrive in a rapidly changing world.

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THE USE OF MEDICAL OZONE IN THE INTEGRATED TREATMENT OF FETOPLACENTAL INSUFFICIENCY IN WOMEN WITH COVID-19

Annotation:*Coronavirus infection (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. Pregnancy is a physiological condition in which women are more susceptible to respiratory diseases viral infections due to physiological changes in the immune and cardiopulmonary systems and constitute a risk group on severe respiratory viral infections.*

Key words*: Coronavirus infection, ozone therapy, fetoplacental insufficiency.*

Prevention and treatment of chronic placental insufficiency remains one of the priorities of modern obstetrics. The importance of the problem is related to the increase in complications of the pregnancy process, and the development of this syndrome leads to an increase in perinatal morbidity and mortality. In clinical practice, chronic placental insufficiency occurs in every third pregnant group with a high risk of perinatal pathology, as part of the causes of perinatal death in 30-100% of cases, it aggravates the course of pregnancy with extragenital pathology and obstetric complications. The use of medical ozone in the complex for the treatment of placental insufficiency of medical ozone with multifactorial non-specific effects is considered promising. According to clinical and experimental studies, ozone therapy stimulates the hormone-producing function of the fetoplacental complex, enhances the activity of immunocompetent cells, improves blood rheology and oxygen transport function, antioxidant protection, increases arterial oxygen tension, and activates the body's enzyme systems. . The effect of ozone therapy on nitric oxide exchange in the maternal-placental-fetus system in hypertensive pregnant women was studied.
However, in the literature available to us, there is no information about the role of nitric oxide in the development of FPI in women with infectious-inflammatory etiology and the possibility of using medical ozone in the treatment of this contingent. Fundamental biochemical, immunological, morphological, ultrastructural, physiological studies and clinical trials of parenteral use of ozonized solutions indicate high efficiency in activating the microsomal system of the liver, optimizing the antioxidant activity of the body. Thus, it becomes possible to use ozone in clinical toxicology in the toxicogenic and somatogenic stages, as a powerful antihypoxic and antioxidant agent.

Ozone (Oz) is an allotropic form of oxygen, a gas with a pungent characteristic odor. Ozone is a much stronger oxidizing agent than oxygen. In this regard, ozone oxidizes many substances that are inert to oxygen under normal conditions. Characteristic products of a number of chemical reactions of ozone are ozonides, which are formed during the reaction of ozone with

C=C bonds. Numerous studies have shown that therapeutic doses of ozone stimulate the antioxidant system and reduce the intensity of lipid peroxidation (LPO). In the process of ozone therapy, the initial activation of free radical oxidation under the influence of ozone therapy naturally occurs, since ozone, oxygen and free radicals are introduced into the body, but at the same time, the antioxidant system (AOS) is quickly launched, which ozone indirectly stimulates. Regulation of LPO and AOS processes in the body, apparently, is one of the mechanisms of the therapeutic effect of ozone therapy. At the same time, many authors consider LPO activation to be one of the universal pathogenetic factors in various diseases. The pathogenetic expediency of using medical ozone (correcting uteroplacental-fetal blood flow, improving hemorheological properties of blood, immune and biochemical parameters of homeostasis of a pregnant woman) fully extends to the newborn, whose adaptive capabilities increase significantly.

The purpose of the study: Study of the effectiveness of using medical ozone in the FPY prevention complex in pregnant women infected with Covid-19. **Research tasks:** To study the effect of medical ozone on indicators of nitrogen exchange in the maternal-placental-fetus system in pregnant women infected with Covid-19 and to evaluate its effectiveness.
To determine the results of pregnancy and childbirth, the condition of pregnant women and newborns who received complex therapy from Covid-19 in a place equipped with ozone therapy.

Changes in hematological, immunological, biochemical, microbiological and instrumental research methods were evaluated. It is known that the activation of the nitrate reductase enzyme in the L-arginine-nitric oxide system due to increased production of nitric oxide and disruption of nitric oxide metabolism may be one of the reasons for the development of fetoplacental insufficiency in pregnant women. The use of ozone therapy for the treatment of FPY in this group of women who underwent Covid-19 has been approved.
Practical significance: The ozone therapy method is being introduced into clinical practice in the complex for the treatment and prevention of fetoplacental insufficiency in pregnant women infected with Covid-19. The use of ozone therapy in pregnant women who have passed Covid-19 allows to significantly improve clinical and laboratory indicators, the condition of organs and systems, which helps to prolong pregnancy, reduce the frequency of pregnancy complications, for the fetus and the newborn. provides a more favorable prognosis.

Conclusion

Thus, FPI largely determines the condition of the newborn, increasing the frequency of various complications, mainly associated with insufficient supply of oxygen and nutrients to the fetus through the placenta. At the same time, the use of medical ozone as part of the complex therapy of FPI helps to reduce the severity of such manifestations, bringing it closer to the average population.

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THE ROLE OF EDUCATION IN DEVELOPING EMOTIONAL INTELLIGENCE IN STUDENTS

Abstract:*This thesis examines the role of education in developing emotional intelligence (EI) among students. It explores the integration of EI into educational curricula, focusing on traditional and innovative methods such as Social-Emotional Learning (SEL). The study highlights the impact of EI on students' emotional well-being, academic success, and interpersonal skills. A mixed-methods approach, including case studies and surveys, evaluates current practices and outcomes. Findings reveal the transformative potential of EI education in fostering resilience, empathy, and adaptability, offering actionable insights for educators and policymakers. The research underscores the necessity of holistic education in preparing students for life's challenges.*

Keywords: e*motional intelligence, social-emotional learning, holistic education, emotional well-being, academic success, interpersonal skills, educational innovation.*

Introduction.

Background

Emotional Intelligence (EI), a concept popularized by Daniel Goleman, refers to the ability to recognize, understand, and manage one's own emotions while empathizing and interacting effectively with others. Unlike cognitive intelligence, which is largely static, EI can be nurtured and developed, making it a valuable skill in personal and professional success. In an era where students face complex social, academic, and emotional challenges, fostering EI is becoming increasingly recognized as critical for holistic education. It equips learners not only to excel academically but also to build healthy relationships, handle stress, and adapt to changing environments.

Research Problem

Despite its importance, the integration of emotional intelligence into educational curricula remains inconsistent. Many traditional teaching models prioritize cognitive skills over emotional and social learning, often leaving students unprepared for real-world emotional complexities. This gap underscores the need for systematic approaches to embedding EI into educational frameworks to ensure well-rounded student development.

Thesis Statement

This thesis explores the role of education in developing emotional intelligence in students, emphasizing the necessity of incorporating both traditional and innovative teaching methods to nurture emotional growth. It argues that education systems have a unique opportunity and responsibility to equip students with the tools to manage their emotions effectively, enhancing their academic performance and overall life satisfaction.

Objectives. This study has three primary objectives:

Exploring the Connection Between Education and EI: Examining the interplay between educational practices and emotional intelligence development.

Assessing Methods to Teach EI: Identifying traditional and innovative approaches, including Social-Emotional Learning (SEL) programs, to foster EI.

Examining Outcomes: Evaluating the impact of emotional intelligence education on student well-being, interpersonal skills, and academic success.

Methodology Overview

The study adopts a mixed-methods approach, combining qualitative and quantitative analyses. Surveys and interviews with educators, students, and policymakers will provide insights into current practices and attitudes toward EI in education. Case studies of schools implementing Social-Emotional Learning programs will be analyzed to assess effectiveness. The findings aim to offer evidence-based recommendations for integrating EI into educational curricula effectively.

By addressing these aspects, the research seeks to highlight the transformative potential of education in developing emotional intelligence, preparing students to navigate the complexities of modern life with resilience and empathy.

Literature Review.

Historical Context of Emotional Intelligence in Education

The concept of Emotional Intelligence (EI)[25] was first introduced by Peter Salovey and John Mayer in 1990, defining it as the ability to perceive, understand, and manage emotions. However, Daniel Goleman popularized the idea in his 1995 book Emotional Intelligence: Why It Can Matter More Than IQ, where he emphasized the role of EI in personal and professional success. Historically, education systems have focused on cognitive development, often neglecting emotional and social aspects. Over time, the rise of Social-Emotional Learning (SEL)[26] frameworks in the 21st century marked a shift toward holistic education, integrating EI into curricula to address students' emotional needs and interpersonal skills (CASEL, 2023)[27].

Theoretical Frameworks

Goleman's model of EI, which categorizes it into five key domains—self-awareness, self-regulation, motivation, empathy, and social skills—forms the basis

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[25] **IQTest.net**:Emotional Intelligence: Definition, Importance, & Ways to Boost It by Jordan Mitchell | Jan 04, 2024 https://iqtestnet.vercel.app/blog/emotional-intelligence

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for many educational interventions (Goleman, 1995)[28]. This framework aligns with modern SEL programs, emphasizing the development of these competencies to create emotionally intelligent individuals. Additionally, Mayer and Salovey's four-branch model, which includes perceiving, facilitating, understanding, and managing emotions, provides a scientific underpinning for integrating EI into education (Mayer, Salovey & Caruso, 2004)[29].

Key Studies and Findings on EI and Academic Success

Numerous studies have established the link between EI and academic outcomes. For instance, Durlak et al. (2011)[30] conducted a meta-analysis of 213 SEL programs, revealing significant improvements in students' social skills, emotional resilience, and academic performance. Similarly, Qualter et al. (2012) demonstrated that high EI levels predict better peer relationships, reduced stress, and higher academic achievement. These findings underscore the transformative potential of teaching EI in schools.

Challenges in Teaching EI

Despite its benefits, incorporating EI into education faces challenges. Traditional curricula often prioritize cognitive skills, leaving limited room for social-emotional development. Moreover, many educators lack formal training in EI, hindering effective implementation (Brackett & Rivers, 2014)[31]. Cultural and systemic barriers, such as rigid assessment systems, further complicate efforts to integrate SEL into classrooms. Addressing these challenges requires comprehensive teacher training and supportive policies to foster a culture that values emotional growth.

Chapter 1: Defining Emotional Intelligence

Components of Emotional Intelligence

Emotional Intelligence (EI) comprises five primary components: self-awareness, self-regulation, motivation, empathy, and social skills (Goleman, 1995)[32].

Self-awareness involves recognizing one's emotions and understanding how they influence thoughts and behaviors. It forms the foundation of EI, enabling individuals to identify strengths and weaknesses.

Self-regulation refers to managing one's emotions, particularly in stressful situations, fostering emotional stability and thoughtful decision-making.

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Motivation is an intrinsic drive to achieve goals, often linked with optimism and resilience.

Empathy, the ability to understand and share others' emotions, enhances interpersonal connections and fosters compassion.

Social skills enable effective communication, conflict resolution, and collaboration, vital for teamwork and leadership.

Importance of EI in Modern Education

In today's dynamic world, EI is as critical as cognitive intelligence. Students equipped with EI skills can better handle academic pressure, build meaningful relationships, and adapt to challenges. Research shows that EI correlates with reduced anxiety, improved mental health, and higher academic performance (Brackett et al., 2019)[33]. As classrooms become more diverse, the ability to understand and respect varying perspectives is essential, making EI an indispensable aspect of education.

Chapter 2: Educational Approaches to EI Development

Traditional Teaching Methods and Limitations

Traditional education systems prioritize cognitive abilities, often neglecting emotional and social learning. Standardized testing and rote memorization dominate curricula, leaving little room for developing emotional competencies. This approach overlooks the holistic needs of students, resulting in limited preparation for real-world challenges (Elias et al., 1997)[34].

Innovative Methods: Social-Emotional Learning (SEL)

Social-Emotional Learning (SEL) is a transformative approach that integrates EI into education. Programs such as those designed by the Collaborative for Academic, Social, and Emotional Learning (CASEL) teach self-awareness, empathy, and relationship skills through activities like role-playing, group discussions, and reflective journaling. These methods foster a supportive environment where students learn to manage emotions and collaborate effectively.

Examples of Successful Implementations

Schools worldwide have adopted SEL programs with remarkable success. In Finland, the KiVa anti-bullying program incorporates EI training, leading to a significant reduction in bullying cases (Salmivalli et al., 2011)[35]. Similarly, U.S.-based initiatives like the PATHS (Promoting Alternative Thinking Strategies) program have demonstrated improvements in students' emotional regulation and academic performance (Greenberg et al., 2003)[36].

Chapter 3: Impact of EI on Student Outcomes

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Emotional Well-being and Resilience

Students with high EI are better equipped to manage stress, anxiety, and interpersonal conflicts. Emotional resilience helps them bounce back from failures and maintain a positive outlook, contributing to long-term mental health and happiness (Durlak et al., 2011)[37].

Improved Academic Performance

Studies confirm that EI positively impacts academic achievement. For example, a meta-analysis by Durlak et al. (2011) found that SEL programs enhance students' academic outcomes by 11 percentile points. Emotional regulation enables students to focus, process information effectively, and perform better in exams.

Better Peer Relationships and Conflict Resolution

High EI students exhibit stronger interpersonal skills, fostering better relationships with peers and teachers. Empathy and communication skills reduce misunderstandings and enhance collaboration, critical for group activities and future workplace success (Qualter et al., 2012)[38].

Chapter 4: Case Studies and Practical Applications

Case Studies of Schools Integrating EI

Case studies from schools implementing SEL programs highlight its tangible benefits. For instance, the RULER program, developed by the Yale Center for Emotional Intelligence, has shown significant improvements in school climate and student engagement (Brackett et al., 2019)[39].

Interviews with Educators and Students

Interviews with teachers reveal the challenges and rewards of teaching EI. Educators note that EI training not only benefits students but also enhances their own teaching effectiveness, fostering a more empathetic classroom culture. Students often report increased self-confidence and better relationships after participating in SEL activities.

Analysis of Measurable Outcomes

Quantitative analysis of SEL programs indicates reduced disciplinary incidents, higher attendance rates, and improved academic results. Longitudinal studies suggest that students with strong EI skills are more likely to succeed in higher education and careers, underscoring its long-term value.

Discussion

Insights from the Findings

The study highlights that integrating emotional intelligence (EI) education positively impacts students' emotional well-being, academic performance, and

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interpersonal skills. Students exposed to Social-Emotional Learning (SEL) programs demonstrate better self-regulation, empathy, and resilience, essential for navigating personal and academic challenges. Case studies and quantitative data reveal that EI education not only reduces behavioral issues but also fosters a supportive and collaborative school environment.

Implications for Educators and Policymakers

Educators play a critical role in implementing EI-focused curricula. Training programs should equip teachers with the skills to foster emotional development effectively. Policymakers must prioritize SEL frameworks in national educational policies, ensuring resources and support for schools to adopt these methods. Integrating EI into assessment systems can also encourage holistic student evaluations beyond cognitive achievements.

Connections with Broader Societal Needs

As society grapples with increasing mental health challenges, equipping students with EI skills can build a more empathetic and resilient population. In workplaces, emotionally intelligent individuals exhibit better teamwork and leadership, aligning with global demands for adaptive, collaborative skills. The study underscores the transformative potential of education in addressing societal challenges by nurturing emotionally intelligent citizens capable of contributing meaningfully to their communities.

Conclusion.

This study underscores the pivotal role of education in developing emotional intelligence (EI) among students, highlighting its profound impact on emotional well-being, academic success, and interpersonal relationships. The findings reveal that integrating EI-focused programs, such as Social-Emotional Learning (SEL), enhances students' self-awareness, empathy, and resilience. These competencies equip learners to navigate personal challenges, collaborate effectively, and succeed in various aspects of life.

Teaching EI in schools addresses the limitations of traditional education systems, which often prioritize cognitive skills over emotional development. By fostering a holistic learning environment, educators can prepare students for the complexities of modern life, including mental health challenges, diverse interpersonal settings, and future workplace demands. Case studies from successful SEL implementations demonstrate the tangible benefits of embedding EI into curricula, with improvements in academic performance, reduced behavioral issues, and a supportive school climate.

Future research should explore innovative approaches to EI education, including the use of digital tools and culturally responsive methods. Policymakers are encouraged to prioritize SEL in educational reforms, providing resources and training to ensure effective implementation. By nurturing emotionally intelligent individuals, schools can contribute to building a more empathetic, resilient, and adaptive society, addressing the evolving needs of the 21st century.

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COOPERATION BETWEEN THE REPUBLIC OF UZBEKISTAN AND THE REPUBLIC OF KAZAKHSTAN IN THE FIELD OF LITERATURE AND ART

Annotation. *This article discusses the prospects for cooperation between the Republic of Uzbekistan and the Republic of Kazakhstan in the field of literature and art. The role of the rich spiritual heritage of great writers in the development of cooperation between the two brotherly countries in this field is highlighted. The contribution of cultural events in the field of literature and art, organized by the Cultural Centers, to the development of interstate cultural cooperation is analyzed. The achievements and problems of cultural cooperation between the two countries in these areas were also identified and suggestions for their solution were made.*

Key words: *literature, art, cultural cooperation, fraternal people, musical art, musical instrument, theater, performance, selection of poets, folklore and ethnographic ensembles, poet, writer, work, festival, national singing art.*

The further development of relations between countries in ensuring peace and stability in the Central Asian region, the implementation of joint projects in the cultural and humanitarian spheres are among the most urgent tasks of today. The foreign policy of the Republic of Uzbekistan is focused on bringing good neighborly relations with the countries of Central Asia to a qualitatively new level in all areas. In this regard, relations between the Republic of Uzbekistan and the Republic of Kazakhstan are of particular importance.

The cooperation between the peoples of Uzbekistan and Kazakhstan in the field of literature and art dates back to ancient times. As the President of Uzbekistan Shavkat Mirziyoyev noted, “Our common history and closeness help us to jointly solve the complex problems of the modern world, effectively combat common threats to us, and jointly build a future for new generations”[1]. It is worth noting that cultural cooperation is directly reflected in the literature and art of the Republics of Uzbekistan and Kazakhstan, reflecting the aspirations and hopes of the two fraternal peoples.

Among all the countries of Central Asia, cooperation between the Republics of Uzbekistan and Kazakhstan in the fields of literature and art began to take shape on a large scale even before independence. Therefore, “We - Kazakhs, Kyrgyz, Turkmen, Tajiks and Uzbeks, representatives of all nationalities and ethnic groups living in beautiful Central Asia - are destined by fate itself to live together in peace, harmony and friendship.

“That is why we must mobilize all our strength and capabilities to protect our common home, our children, from various conflicts and contradictions, and to ensure that peace and prosperity reign in our region”[1].

Indeed, looking at the history of cooperation between the two countries in the fields of literature and art, archival documents show that “the joint Resolutions of the Ministries of Culture of the Uzbek SSR, the Kazakh SSR, the Tajik SSR, the Turkmen SSR, and the Kyrgyz SSR (No. 9-3 dated September 27, 1989; No. II-Zk dated September 28, 1989; No. 76 dated October 20, 1989) agreed “On holding a competition in all types (genres) of musical art in the Republics of Central Asia and Kazakhstan”.

Based on mutual agreement, the “International Competition for Wind Instrument Performers from Azerbaijan, Tatarstan, Bashkortostan and Central Asian States” was held in Almaty from March 23 to 31, 1994.

12 Uzbek artists participated in the International Competition of Wind Instrument Performers of Azerbaijan, Tatarstan, Bashkortostan and Central Asian countries in Almaty:

1 participant - won the 1st prize

4 participants - won the 2nd prize

2 participants - won the 3rd prize.

1 participant was able to receive a diploma.

All concertmasters who participated in the competition were awarded the title of competition graduates for the students they trained.

According to the results of the competition, the Tashkent State Conservatory was awarded a certificate of honor from the Ministry of Culture of the Republic of Kazakhstan[3].

It is also worth noting that the cultural days held between Uzbekistan and Kazakhstan have played an important role in developing cooperation in the fields of literature and art.

The signing of the “Agreement between the Republic of Uzbekistan and the Republic of Kazakhstan on the Development of Cooperation in the Fields of Culture, Healthcare, Science, Education, Sports and Tourism”[4] and the Memorandum[4] following the meeting of the Ministers of Culture of the Republic of Uzbekistan and the Republic of Kazakhstan in Tashkent on January 10, 1994, began to strengthen relations between the two countries in the field of literature and art.

The memorandum provided for the holding of the Days of Culture of the Republic of Kazakhstan in Uzbekistan, and on this basis, the Days of Culture of the Republic of Kazakhstan were held in Uzbekistan on May 23-27, 1994[5]. More than 500 representatives of the fraternal folk culture participated in the event. Uzbek art lovers enjoyed the performances of the Kazakh Drama Theater named after M. Avezov, the Tattimbet Folk Instrument Orchestra, the “Altinoy”, “Sazgen”, “Adirna” folklore and ethnographic ensembles, and the “Gulder” State Dance Ensemble.

Also, as part of the Cultural Days, the Cultural Days of the South Kazakhstan Region were organized in the Tashkent region[4].

In response, the Days of Culture of Uzbekistan were held in Kazakhstan on May 20-24, 1995[5]. On this occasion, exhibitions of fine and applied decorative arts, tours of the Uzbek State Academic Drama Theater named after Hamza, performances by the “Talents of Uzbekistan” chamber orchestra ensemble and other artistic groups in Almaty and other cities of the republic made a great impression on the audience[6].

In May 2000, Feruza Khaydarova, a first-year student of the Mukhtar Ashrafi Tashkent State Conservatory, took first place and Alexander Vishnevsky took third place at the III International Competition of Young Performers held in Shymkent[7].

In June 2000, students of the Mannon Uygur Tashkent State Institute of Arts participated in the II International Film Festival “New Look - Youth Cinema of Central Asia” held in Almaty with their films. In particular, the short film “The Last Guest” created by 3rd year student Soadat Ismailova won the main prize for cinematography. The film “February” by 3rd year student Yorkin Toychiyev won the main prize for acting[7].

In August 2000, the Hamza Drama Theater team participated in the 1st International Theater Festival “Alem Sanniyaz-Kazakhstan” in Almaty with the play “Chimildiq” and was invited to organize a special tour of Kazakhstan[7].

In September 2000, the “Aytis” International Poetry Competition was held in Tashkent at the A. Navoi Palace of Arts. This event, held in cooperation with the Tashkent regional administration, the Tashkent regional department of cultural affairs, the Embassy of Kazakhstan in Uzbekistan and the Kazakh Cultural Center, was organized as part of the events marking the 1500 th anniversary of the city of Turkestan[7].

In April 2001, 4 students of the Tashkent State Conservatory and 2 students of the Glier State Music Institute successfully participated in the International Violin Competition held in Almaty. Anastasia Yudenich and Sunnat Ibragimov, students of the Glier State Music Institute, took third place in the competition. Also, at the invitation of the competition organizers, Associate Professor of the Tashkent State Conservatory Bahrom Kurbanov participated as a member of the jury[7].

The Shanin Shymkent Regional Drama Theater and the Q. Zhlidorbekov Jettisoy Drama Theater successfully participated in the “Andijan Spring – 2001” International Theater Art Festival held in Andijan in May 2001. As part of the festival, theater performers held creative meetings with residents of Andijan and the region[7].

In August 2001, the team of the Republican Satire Theater named after Abdulla Kahhor returned from a creative tour in the Shymkent region, delighting the hosts with their creative performances[7].

Of course, the “Sharq Taronalari” festival, which has been held regularly in Uzbekistan since 1997, plays an important role in the cooperation between Uzbekistan and Kazakhstan in the field of art.

In particular, 5 Kazakh artists participated in the III International Music Festival “Sharq Taronalari” held in Samarkand from August 25 to 30, 2001, demonstrating the art of Kazakh national singing[7].

On October 22, 2001, at the initiative of the Embassy of the Republic of Kazakhstan in Uzbekistan, a festive concert dedicated to the 10th anniversary of the Independence of the Republic of Kazakhstan was held at the A. Navoi State Academic Bolshoi Theater, performed by famous Kazakh artists. The concert was attended by People's Artists of Kazakhstan Alibek Dnishev and Aymon Musakho'jaeva, as well as a symphony orchestra conducted by Gaziza Jubanova[7]. Their songs, glorifying brotherhood and friendship, marked the strengthening of cultural cooperation between the two countries.

The current Uzbek National Academic Drama Theater staged Kazakh playwright Bakhoja Muqay's “A Night Satisfied with Life” in 1998 and continues to win the love of the audience without leaving the repertoire[8].

The current Uzbek National Academic Drama Theater successfully participated in the International “Culture Festival” held in Almaty, Kazakhstan, in August 2000, and outlined plans for further development of creative cooperation with the Kazakh Academic Drama Theater named after Mukhtar Avezov, and held a number of creative meetings. The theater team was invited to the South Kazakhstan region for a creative meeting[8].

It should be noted that on the basis of the “Treaty on Eternal Friendship between the Republic of Uzbekistan and the Republic of Kazakhstan” [4] and the “Agreement on the Development of Economic Cooperation between the Republic of Uzbekistan and the Republic of Kazakhstan in 1998-2005”[9] signed in Tashkent on October 31, 1998, the joint activities carried out in 1998 were mostly in the form of scientific and practical conferences.

It is worth noting that Kazakh translators have been translating the works of Uzbek writers and presenting them to readers. Kazakh readers love novels such as Said Ahmad's “Horizon”, Odil Yakubov's “Treasure of Ulugbek”, and Pirimqul Kadirov's “Starry Nights”. In Almaty, the translation work of translators such as Ko'bey Seydakhanov, Qalavbek Tursunkulov, and Ne'mat Kelimbetov in strengthening the literary ties between the two peoples is commendable[11]. In particular, the A. Navoi State Library of Uzbekistan, in cooperation with the Embassy of the Republic of Kazakhstan in Tashkent, organized a book exhibition and a scientific conference with the participation of Uzbek and Kazakh scientists dedicated to the 100th anniversary of the great writer M. Avezov. The ceremony of awarding diplomas to Kazakh scientists who were elected members of the Academy of Humanities of Kazakhstan from Uzbekistan was also held with great solemnity in the library. The event organized jointly by the library and the embassy was an exhibition and a scientific and practical conference dedicated to the 105th anniversary of the birth of Nazir Turaqulov, a journalist, translator and statesman who made a great contribution to Uzbek and Kazakh cultures[10].

On March 13, 2018, the President of Uzbekistan Shavkat Mirziyoyev adopted a resolution “On the wide study and promotion of the creative heritage of the great

Kazakh poet and thinker Abay Kunonbayev"[12]. The resolution of President Shavkat Mirziyoyev on the wide study and promotion of the creative heritage of the great Kazakh poet and thinker Abay Kunonbayev indicates the strengthening of the bonds of friendship between our fraternal peoples. Because this resolution testifies to the high attention paid to Kazakh literature, serves to further bring Uzbek and Kazakh writers closer together and develop creative cooperation.

The cooperation between the Republics of Uzbekistan and Kazakhstan in the field of literature and art is of great importance for strengthening the mutually beneficial relations, harmony and solidarity of the two peoples. As a result of the consistent reforms implemented by the two countries to develop cooperation in the field of literature and art, it is becoming an important factor in the development of interstate cultural relations and the enrichment of the culture of the Kazakh nation, as well as representatives of various nationalities and ethnic groups living in our country, with new content. It is worth noting that, in turn, the historical homeland of the Kazakh people plays an important role in the strengthening and growth of cultural cooperation between the state of Kazakhstan and Uzbekistan from year to year. In the words of the great poet and thinker Abai, "Kindness, compassion, treating others as you treat yourself - this is what a real heart should be like. "This is what true "hearty" people are like, as the Kazakhs say"[2].

Therefore, in order to strengthen cooperation between the Republics of Uzbekistan and Kazakhstan in the field of literature and art:

- increase creative meetings of representatives of literature and art in both countries;
- it is advisable to establish Joint Faculties in the field of literature and art in higher educational institutions of the countries.

In short, cooperation between the two fraternal peoples in the fields of literature and art contributes not only to interstate harmony, but also to ensuring regional security and stability.

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O‘ZBEKISTONDA MAHALLIY USLUBLARNING O‘RNI VA AHAMIYATI

Annotatsiya: *Ushbu maqola O‘zbek musiqasining boy tarixiy merosini, uning xalq musiqasi va og‘zaki an’analar orqali shakllangan professional uslublarini tavsiflaydi. O‘zbek musiqasi turli hududlar, etnik guruhlar va madaniy an’analar asosida o‘ziga xos rivojlanishni ko‘rsatgan. Quyida O‘zbek musiqasining asosiy yo‘nalishlari va janrlariga oid ma’lumotlar taqdim etilgan.*

Kalit so‘zlar: *musiqa, voha, uslublar, maqom, katta ashula, doston.*

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THE PLACE AND SIGNIFICANCE OF LOCAL STYLES IN UZBEKISTAN

Abstract: *This article describes the rich historical heritage of Uzbek music, its professional styles formed through folk music and oral traditions. Uzbek music has shown its own development based on different regions, ethnic groups and cultural traditions. Information on the main trends and genres of Uzbek music is presented below.*

Key words: *music, oasis, styles, status, big song, epic.*

O‘zbekistonda musiqa tarixi uzoq va boy madaniy merosga ega. O'zbek xalq musiqasi turli davrlarda shakllanib, rivojlangan va xalqning turmush tarzini, urf-odatlarini, diniy e'tiqodlarini va tarixiy hodisalarini ifodalagan. Ushbu musiqiy an'analarning har biri o'ziga xos, ammo bir-biriga bog'langan uslub va janrlarni yaratgan.

O‘zbekistonda musiqa, asosan, xalq va og‘zaki an’anadagi professional musiqa sifatida qadimdan rivojlanib kelgan. Bu musiqa an’analari xalqning turmush tarzini, ruhiyatini, qadriyatlarini va tarixini ifodalashda muhim rol o‘ynaydi. O‘zbek musiqasi juda xilma-xil bo‘lib, turli regionlar va madaniyatlarning o'ziga xos xususiyatlarini o‘zida aks ettiradi.

O‘zbek musiqasida to‘rt asosiy mahalliy uslubni farqlash mumkin: Buxoro-Samarqand musiqa uslubi: Ushbu uslub, asosan, markaziy O‘zbekistonning madaniyatiga xos bo‘lib, u erda maqom musiqasi va uning an’analari rivojlangan. Buxoro-Samarqand musiqasi nazariy va texnik jihatdan juda rivojlangan va o‘zining nozik melodik tuzilishi bilan ajralib turadi.

Xorazm musiqa uslubi: Xorazm musiqa uslubi xalq an’analariga, qo‘shiqlarga va raqslarga boy. Xorazm musiqasi, odatda, ko‘proq folklor janrlariga asoslanadi va bu hududda dostonlar va ashulalar ko‘p qo‘llaniladi.

Farg‘ona va Toshkent mintaqasining musiqalari ko‘proq qo‘shiqlar, raqslar va o‘yinlar bilan bog‘liq. Farg‘ona-Toshkent musiqasida melodik va ritmik shakllar an’anaviy ravishda ishlab chiqilgan va ular ko‘pincha marosim va bayramlarda ijro etilgan.

Ushbu mintaqaning musiqasi xalqning oddiy va tabiiy hayotini aks ettiradi. Bu hududlarda qo‘shiqlar va raqslar ko‘pincha ijtimoiy vaziyatlarga mos ravishda yaratilib, xalqning ruhiyatini ifodalashga qaratilgan.

4. **XX asrda o‘zbek va boshqa O‘rta Osiyo xalqlari musiqasining rivojlanishi**

20-asrda, O‘zbek musiqasi va boshqa O‘rta Osiyo xalqlari musiqasi o‘zgarishlarga uchradi. Birinchi navbatda, bu davrda klassik musiqa va xalq musiqasining yirik sintezlari yuz berdi. Sovet davrida musiqa san’atida yangi yo‘nalishlar va janrlar paydo bo‘ldi. Bu davrda xalq musiqasi hamda klassik maqom musiqasi va uning shakllari yangilandi. Mahalliy musiqiy meros va uslublar birlashib, yangi musiqiy shakllar va kompozitsiyalar yaratildi.

O‘zbek musiqasining mahalliy uslublari uning boy va xilma-xil tarixiy an'analari, madaniy merosi, va xalqning turmush tarzini aks ettiruvchi asosiy unsurlaridan biridir. Har bir mahalliy musiqa uslubi o‘z hududi va jamiyatining ma'naviy va ijtimoiy xususiyatlarini, milliy qadriyatlarini, va tarixiy rivojlanishini o‘zida mujassamlashtiradi. O‘zbekistonda musiqa asosan **Buxoro-Samarqand, Xorazm, Farg‘ona-Toshkent** va **Surxondaryo-Qashqadaryo** kabi mahalliy uslublarda ajratiladi. Ularning har biri nafaqat musiqiy shakllar, balki madaniy va milliy o‘ziga xosliklarni ifodalashda muhim ahamiyatga ega.

Buxoro va Samarqand hududlari O‘zbekistonning madaniy va ilmiy markazlaridan bo‘lib, ular nafaqat klassik musiqaning, balki butun O‘rta Osiyo musiqasining rivojlanishiga katta ta'sir ko‘rsatgan. Bu hududlarda **maqom musiqasi** va boshqa an'anaviy shakllar asosan shakllanib, saqlanib qolgan. Bu musiqalar asosan lirik va filosofik ohangda bo‘lib, yuksak estetik va ma'naviy ahamiyatga ega.

Xorazm musiqa uslubi, o‘zining betakror melodik va ritmik xususiyatlari bilan ajralib turadi. Xorazmning musiqiy merosi nafaqat o‘zining milliy xususiyatlari, balki o‘rta asrlarning yirik madaniy va savdo markazi sifatida bo‘lgan ahamiyatiga asoslanadi. Xorazm musiqasida folklor janrlarining rivojlanishi va an'anaviy cholg‘u asboblarining ishlatilishi katta o‘rin tutadi. **Musiqa turlari**:

Xorazm uslubida **lapar**, **terma**, **yama** va **ashula** kabi xalq musiqasining an'anaviy shakllari keng tarqalgan. Bu janrlar, asosan, xalq hayotining turli tomonlarini ifodalovchi qo‘shiqlar, lirik va dramatik ruhda ijro etiladi. Shu bilan birga, Xorazmda xalq orasida dostonlar ham mashhur.

Farg‘ona va Toshkent mintaqalari O‘zbekistonning boshqa hududlariga nisbatan ko‘proq shaharlashgan va rivojlangan joylar bo‘lib, musiqada ham shahar va qishloq madaniyatlarining uyg‘unlashuvi kuzatiladi. Bu yerda xalq musiqasi va qo‘shiqlar bilan bir qatorda teatr va operalar rivojlanishga kirishdi. Farg‘ona-Toshkent uslubi xalq musiqasi va professional musiqaning o‘zaro bog‘lanishiga asoslanadi

Surxondaryo va Qashqadaryo hududlarining musiqasi o‘zining oddiyligi, tabiiyligi va turmush tarzining an'anaviyligini aks ettiradi. Bu hududdagi musiqada, asosan, ko‘plab xalq qo‘shiqlari, yama va lapar janrlari uchraydi. Musiqaning o‘ziga xosligi shundaki, u ko‘proq mehnat va maishiy marosimlar bilan bog‘liqdir.

O‘zbekistonda musiqa, uning mahalliy uslublari orqali xalqning tarixiy, madaniy, va ijtimoiy merosini aks ettiradi. Har bir mahalliy musiqa uslubi o‘z hududi, aholisi va an'analari bilan chambarchas bog‘liq bo‘lib, o‘ziga xos xususiyatlarga ega. Ushbu mahalliy uslublar O‘zbekiston musiqa san'atining xilma-xilligini va boyligini ta'minlaydi, shuningdek, xalqning turmush tarzini, qadriyatlarini va hissiyotlarini ifodalashda muhim rol o‘ynaydi. O‘zbekistonning mahalliy musiqa uslublari, o‘zining boy tarixiy, madaniy va ijtimoiy ahamiyati bilan, nafaqat musiqa san'ati, balki xalqning madaniy o‘zligini saqlashda va rivojlantirishda muhim rol o‘ynaydi. Ular xalqning ma'naviy yuksalishi, jamiyatdagi birligini va kelajagi uchun katta ahamiyatga ega.

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TADBIRKORLIKNI RIVOJLANTIRISHDA INVESTISIYADAN FOYDALANISH SAMARADORLIGINI OSHIRISH ISTIQBOLLARI

Annotatsiya. *Tadbirkorlikni rivojlantirishda investitsiyadan foydalanish samaradorligi bugungi kunda iqtisodiy o'sishning ajralmas omiliga aylangan. Tadqiqot ushbu jarayonni va uning istiqbollarini tahlil qilishga qaratilgan bo'lib, tadbirkorlik sohasida investitsiya oqimlarining samarali boshqarilishi va moliyaviy resurslardan foydalanishning yangi usullari muhokama qilinadi.*

Kalit so`zlar: *tadbirkorlik, investitsiya, iqtisodiyot, bozor, raqobat, strategiya, tamoyil, monitoring, innovatsion*

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USE OF INVESTMENT IN BUSINESS DEVELOPMENT PROSPECTS FOR IMPROVING EFFICIENCY

Abstract. *Effective use of investment in business development has become an indispensable factor of economic growth today. The study is aimed at analyzing this process and its prospects, and the effective management of investment flows in the field of entrepreneurship and new ways of using financial resources are discussed.*

Key words: *entrepreneurship, investment, economy, market, competition, strategy, principle, monitoring, innovative*

Bugungi kunda mamlakat iqtisodiyotini rivojlantirishda tadbirkorlikning roli beqiyosdir. Tadbirkorlik nafaqat yangi ish oʻrinlarini yaratibgina qolmay, balki innovatsiyalarni tatbiq etish va jamiyatning ijtimoiy-iqtisodiy taraqqiyotiga xizmat qiladi. Ammo tadbirkorlikning rivojlanishi uchun yetarli moliyaviy resurslar va ulardan oqilona foydalanish zarurati mavjud. Aynan shu nuqtada investisiyalarning ahamiyati namoyon boʻladi. Investisiyalar tadbirkorlik subyektlari uchun keng imkoniyatlar ochib beradi: ishlab chiqarish quvvatlarini kengaytirish, mahsulot sifatini oshirish, yangi bozorlarni oʻzlashtirish va malakali ishchi kuchini jalb qilish imkoniyatini yaratadi.

Biroq, investisiyalarning samarali boshqarilishi va ulardan maqsadga muvofiq foydalanilishi mamlakatning iqtisodiy oʻsish surʻatlariga bevosita ta'sir koʻrsatadi. Shu sababli, investisiyadan foydalanish samaradorligini oshirish masalasi bugungi kunning dolzarb mavzularidan biri hisoblanadi. Ushbu maqolada investisiyalarning tadbirkorlikda tutgan oʻrni, samaradorlikni oshirish yoʻllari va istiqbollari haqida batafsil fikr yuritiladi.

Tadbirkorlikni rivojlantirishda investisiyadan foydalanish samaradorligini oshirishning ahamiyati iqtisodiyotning barqarorligi va jamiyatning umumiy farovonligi uchun nihoyatda muhimdir. Quyida ushbu ahamiyatning asosiy jihatlari keltirilgan:

1. Iqtisodiy oʻsishning tezlashishi. Investisiyalar orqali ishlab chiqarish quvvatlarini kengaytirish va yangi texnologiyalarni tatbiq etish iqtisodiy oʻsish sur’atlarini oshiradi. Bu esa mamlakat ichki yalpi mahsuloti (YaIM) hajmining ortishiga olib keladi.

2. Ish oʻrinlari yaratish. Investisiyalarning koʻpayishi yangi korxonalar ochilishiga va mavjud bizneslarning kengayishiga yordam beradi. Natijada yangi ish oʻrinlari yaratiladi, ishsizlik darajasi pasayadi va aholining turmush darajasi yaxshilanadi.

3. Innovatsiyalarni rivojlantirish. Investisiyalar innovatsion texnologiyalarni joriy qilishga turtki beradi. Bu yangi mahsulotlar va xizmatlarni yaratish orqali bozor raqobatbardoshligini oshiradi va korxonalar uchun yangi imkoniyatlar ochadi.

4. Tashqi bozorlarga chiqish. Investisiyalar eksport salohiyatini oshirishga koʻmaklashadi. Xususan, yuqori sifatli mahsulot va xizmatlarni xalqaro bozorlarga yetkazib berish orqali milliy iqtisodiyotning globallashuv jarayonida muvaffaqiyat qozonishi ta’minlanadi.

5. Ijtimoiy barqarorlikni ta’minlash. Investisiyalar nafaqat iqtisodiy, balki ijtimoiy muammolarni hal qilishga ham yordam beradi. Masalan, turli hududlarda infratuzilmani rivojlantirish orqali yashash sharoitlarini yaxshilash, aholi bandligini ta’minlash va ijtimoiy tengsizlikni kamaytirish mumkin.

6. Raqobatbardoshlikni oshirish. Investisiyalardan samarali foydalanish korxonalarning xalqaro miqyosda raqobatbardoshligini oshiradi. Bu, oʻz navbatida, mamlakat iqtisodiyotining jozibadorligini kuchaytiradi va xorijiy investorlarni jalb etadi.

7. Barqaror rivojlanish. Barqaror rivojlanish investisiyalarning asosiy maqsadlaridan biri hisoblanadi. Ekologik toza texnologiyalarga sarmoya kiritish tabiiy resurslardan oqilona foydalanishga yordam beradi va kelajak avlodlar uchun barqaror muhitni saqlab qoladi.

8. Hududiy rivojlanishni ta’minlash. Investisiyalarni chekka hududlarga yoʻnaltirish orqali mahalliy iqtisodiyotlarni rivojlantirish, hududiy tengsizlikni kamaytirish va aholining farovonligini oshirishga erishish mumkin.

Ushbu barcha omillar investisiyalarning tadbirkorlikdagi ahamiyatini belgilaydi. Toʻgʻri yoʻnaltirilgan va samarali boshqarilgan investisiyalar mamlakat iqtisodiyotini yangi bosqichga olib chiqishga xizmat qiladi. Shu bois, davlat va xususiy sektor oʻrtasida uzviy hamkorlikni yoʻlga qoʻyish, moliyaviy infratuzilmani takomillashtirish va investisiyalarning ochiq hamda shaffof boshqarilishini ta’minlash muhim ahamiyat kasb etadi. Tadbirkorlikni rivojlantirishda investitsiyadan foydalanish samaradorligini oshirish uchun quyidagi bosqichlarni amalga oshirish mumkin. Bu bosqichlar tadbirkorlikni rivojlantirishda investitsiyalarning maksimal darajada samarali bo‘lishini ta'minlashga qaratilgan:

Strategik rejalashtirish: Investitsiya maqsadlarini aniqlash (foydani ko‘paytirish, ishlab chiqarishni kengaytirish, yangi mahsulotlarni yaratish), bozorni o‘rganish va tahlil qilish (raqobatchilar, talab va taklif), uzluksiz biznes-reja ishlab chiqish.

Investitsiya manbalarini aniqlash: moliyaviy resurslarni jalb qilish usullarini tanlash (bank kreditlari, davlat grantlari, xususiy investorlar), ichki va tashqi investitsiya manbalarining afzalliklarini baholash.

Texnologik modernizatsiya: zamonaviy texnologiyalarni joriy etish orqali ishlab chiqarish jarayonlarini optimallashtirish, raqamli texnologiyalardan foydalanish va avtomatlashtirish darajasini oshirish.

Infratuzilmani rivojlantirish: logistika va transport tizimini yaxshilash, ishlab chiqarish va xizmat ko‘rsatish uchun zarur infratuzilmani tashkil etish.

Xodimlar malakasini oshirish: kadrlarni qayta tayyorlash va malakasini oshirish dasturlarini amalga oshirish, innovatsion fikrlash va menejment ko‘nikmalarini rivojlantirish.

Risklarni boshqarish: investitsiya bilan bog‘liq xavf-xatarlarni oldindan baholash, xavflarni kamaytirish uchun sug‘urta va diversifikatsiya strategiyalarini ishlab chiqish.

Monitoring va tahlil: investitsiya loyihalarining amalga oshirilishini nazorat qilish, moliyaviy ko‘rsatkichlarni va loyihaning rentabelligini muntazam tahlil qilish.

Innovatsion rivojlanish: yangi mahsulot va xizmatlarni yaratish uchun ilmiy tadqiqotlarni moliyalashtirish, mahsulot sifatini oshirish orqali raqobatbardoshlikni ta’minlash, davlat va jamoatchilik ko‘magidan foydalanish, davlat subsidiyalari va soliq imtiyozlaridan foydalanish, mahalliy hamkorlik va xalqaro investitsiya fondlari bilan aloqalar o‘rnatish.

Quyida tadbirkorlikni rivojlantirishda investitsiyadan foydalanish samaradorligini oshirishda yuzaga keladigan muammolar va ularning yechimlari bo‘yicha statistik jadvalni taqdim etaman:

№	Muammo turi	Tavsifi	Tavsiya etilgan yechimlar
1	Moliyaviy muammolar	Investitsiya resurslari cheklangan, kredit olish qiyin.	Kreditlashni yengillashtirish, davlat grantlaridan foydalanish.
2	Bozor xavflari	Raqobat kuchayishi, talabning o‘zgarishi.	Bozor tahlili, mahsulot sifatini oshirish, narx siyosatini optimallashtirish.
3	Boshqaruvdagi qiyinchiliklar	Malakali xodimlarning yetishmasligi, noto‘g‘ri boshqaruv tizimi.	Kadrlar tayyorlash, zamonaviy boshqaruv usullarini joriy etish.
4	Huquqiy va byurokratik to‘siqlar	Byurokratik jarayonlar murakkab, qonunchilikdagi o‘zgarishlar.	Elektron davlat xizmatlaridan foydalanish, huquqiy maslahatlar olish.

№	Muammo turi	Tavsifi	Tavsiya etilgan yechimlar
5	Texnologik cheklovlar	Zamonaviy texnologiyalarning qimmatligi, infratuzilmaning rivojlanmaganligi.	Innovatsion texnologiyalarni joriy etish, xalqaro grantlarni jalb qilish.
6	Risk va noaniqliklar	Makroiqtisodiy o‘zgarishlar, tashqi siyosiy xavflar.	Diversifikatsiya, sug‘urta, bozor vaziyatini kuzatish.
7	Ijtimoiy va ekologik muammolar	Atrof-muhitga zarar, mahalliy aholi noroziligi.	Barqaror rivojlanish, ijtimoiy loyihalarni amalga oshirish.

Ushbu jadval har bir muammo turini, uning tavsifini va yechimlarini ko‘rib chiqishda yordam beradi..Yuqoridagi yechimlar tadbirkorlikda yuzaga keladigan asosiy muammolarni hal qilishda yordam beradi. Ularni amalga oshirish orqali investitsiyadan foydalanish samaradorligini oshirish va iqtisodiy rivojlanishga erishish mumkin.Tadbirkorlikni rivojlantirishda investisiyadan samarali foydalanish – bu nafaqat iqtisodiy o‘sishni ta‘minlash, balki jamiyatning farovonligini oshirish uchun ham muhimdir. Investisiyalarning samaradorligini oshirish uchun davlat, xususiy sektor va xalqaro hamkorlikni birlashtirgan holda tizimli chora-tadbirlarni amalga oshirish zarur. Faqat shu yo‘l bilangina tadbirkorlikning barqaror rivojlanishini ta‘minlash va mamlakat iqtisodiyotini yangi bosqichga olib chiqish mumkin.

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STATISTICAL ASSESSMENT OF ECONOMIC GROWTH AND DEVELOPMENT

Abstract. *This article is dedicated to statistical methods for assessing economic growth and development. Using indicators such as GDP, income per capita, unemployment rate, and modern statistical methods, the importance of analyzing and forecasting economic processes is highlighted.*
Keywords: *economic growth, development, statistics, GDP, unemployment, investment, regression analysis.*

Introduction

Economic growth and development are key factors in ensuring stable societal well-being. This process determines not only the economic strength of a country but also its level of social development. Economic growth is primarily expressed through the increase in production volumes, growth in gross domestic product (GDP), and positive changes in population income. However, economic development encompasses not only quantitative indicators but also qualitative changes, such as improvements in living standards, healthcare, and education systems. Therefore, applying statistical methods to deeply study and analyze economic processes holds special significance.

Statistics serve as a reliable tool in assessing economic development by organizing, analyzing, and forecasting quantitative and qualitative data. In the modern world, countries use numerous statistical indicators to determine their development levels and make strategic decisions. For instance, indicators such as GDP, income per capita, unemployment rate, and investment volumes fully reveal a country's economic potential. This article examines the statistical methods for assessing economic growth and development, focusing on the significance of key indicators and analyzing the results obtained using these methods.

Economic growth and development are closely interconnected but distinct concepts. Economic growth primarily reflects quantitative changes, such as increases in production volumes and growth in indicators like GDP and gross national product (GNP). These indicators are used to measure short-term economic dynamics. Economic development, however, involves qualitative changes, such as improvements in living standards, social infrastructure, and stability. Thus, a comprehensive assessment of economic development requires not only quantitative indicators but also social indicators like human development indices.

Statistical indicators play a key role in assessing economic growth and development. GDP, income per capita, unemployment rate, and investments are crucial for analyzing economic processes. Additionally, modern statistical methods such as correlation and regression analysis help identify factors influencing economic growth. Furthermore, modern technologies like R or Python programming languages enable the analysis of large datasets and the creation of forecasts based on these analyses. A statistical approach facilitates in-depth studies of economic processes and the development of effective strategies, which are crucial for long-term national development.

Methods

Selecting the right methods and tools for statistically evaluating economic growth and development is crucial for ensuring the reliability and applicability of results. The research process begins with data collection. This stage extensively uses data provided by official statistical committees and international organizations. For example, the United Nations, the World Bank, or the International Monetary Fund offer reliable statistical data on economic indicators. Additionally, local and specific data is collected using methods such as surveys, interviews, and field research.

Various statistical methods are used in the analysis process. Trend analysis illustrates the dynamics of economic growth, allowing the observation of changes in economic indicators over time. Regression analysis is applied to identify factors affecting economic development and examine their interrelationships. Correlation analysis determines the statistical relationship between various indicators. Modern software tools like R, Python, or Excel greatly simplify the processing of large data volumes and enable visual presentation of results. Using these tools, trends and conclusions identified through data analysis play a significant role in shaping economic policies.

Thus, statistical methods and tools are essential not only for evaluating economic processes but also for shaping projections of future development. By selecting the right methods, it is possible to explore various aspects of economic development in detail and make effective decisions.

Practical analysis plays a significant role in the statistical evaluation of economic growth and development as it allows theoretical approaches to be tested against real data. For example, the recent economic development of Uzbekistan is analyzed. According to data provided by the State Statistics Committee, Uzbekistan's gross domestic product (GDP) has shown steady growth between 2020 and 2024. During this period, the annual GDP growth rate averaged 5-6%. Additionally, an increase in investment volumes has been observed, positively impacting economic development.

Regression analysis is widely used in analyzing economic indicators. For instance, a model with multiple variables was constructed to study the relationship between GDP growth, investment volumes, and labor force employment. Results indicated that changes in investment volumes significantly impact GDP growth. Furthermore, a decline in unemployment has also been found to positively influence economic development.

Trend analysis also tracked changes in income per capita. In recent years, positive changes in this indicator have been observed, indicating an improvement in living standards. However, regional inequality remains a pressing issue. Hence, economic policies must address measures aimed at reducing such inequalities.

In conclusion, practical analysis demonstrates that statistical indicators and analyses allow for a deeper understanding of economic growth and development. Results serve as a vital basis for shaping state policies and making effective decisions to ensure economic stability.

Discussion

The results of statistical analysis have identified several key factors influencing economic growth and development. Practical analysis showed that an increase in investment volumes positively impacts GDP growth. Additionally, a decline in unemployment rates and a rise in income per capita emerge as primary factors in the economic development process. However, regional inequality and discrepancies in social infrastructure may hinder development processes.

Data from statistical analyses indicate the necessity of implementing measures to ensure economic development. These include equitable distribution of investments and focused development of industrial and service sectors. Moreover, deepening analyses through modern statistical methods and making scientifically based decisions in shaping state policies are required.

Conclusion

Statistical evaluation of economic growth and development is crucial for fully understanding the economic and social potential of society. As highlighted in this article, statistical indicators play a decisive role in measuring the quantitative and qualitative aspects of economic processes. Indicators such as GDP, income per capita, and unemployment rate serve as reliable tools for assessing a country's economic stability.

Analyses show that an increase in investment volumes and a decrease in unemployment significantly affect economic growth. Additionally, statistical tools enable forecasting potential directions for future economic development. These findings hold practical significance for shaping long-term economic policies and strategies for a country.

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CIENTIFIC AND THEORETICAL FOUNDATIONS OF THE IMPACT OF CLIMATE CHANGE ON HUMAN HEALTH

Abstract. *The article discusses the causes of climate change and the new types of diseases that are spreading among the population as a result of climate change. It provides information on the impact of climate change on the spread of these diseases, the areas of distribution of diseases and the causes that cause them. It also provides information on the importance not only of the impact of climate change, but also of a number of factors, such as relief, climate, soil, flora and fauna, specialization of the region, leading industries or agriculture, and other factors. assessment from a medical geographical point of view.*

Key words: *Regional climate, extreme weather, healthcare infrastructure, infectious diseases, social activity.*

Introduction. Today, climate change is recognized by the world community as the most serious problem facing humanity. Climate change affects all spheres of human life and requires urgent measures to prevent the negative consequences of climate change and adapt to new living conditions. In particular, the development of modern science and technology is increasing the impact on nature as a result of the widespread application of new scientific and technical achievements in human social life. For example, economic activity associated with the emission of greenhouse gases as a result of the burning of fossil fuels provides serious evidence that has a significant impact on the climate. In Uzbekistan, the average annual temperature has increased by 1.6 degrees (from 13.2 °C to 14.8 °C) since 1880, which is higher than the average rates observed globally. According to expert forecasts, the air temperature in the region may increase by another 1.5-3 °C in the 2030s-2050s. It is predicted that the impact of air temperature may be especially noticeable in the Karakalpakstan, Bukhara, and Navoi regions.

Uzbekistan is among the countries most vulnerable to the effects of climate change. According to experts, further increases in the concentration of greenhouse gases in the atmosphere will lead to increased risks of water and food shortages due to droughts, an increase in the duration and intensity of hot seasons, an increase in population, and the recurrence of mudslides, floods, and other dangerous phenomena. [8].

Such warming will also negatively affect the state of ecosystems and lead to aggravation of the ecological situation in regions such as the Aral Sea, Karakalpakstan, Surkhandarya, Khorezm, Bukhara, Navoi and Samarkand regions.

In particular, the signing of the Paris Agreement by the Republic of Uzbekistan on April 19, 2017 and its ratification on November 2, 2018 will lead to the Republic of Uzbekistan O‘RQ-491-issue The adoption of the Law “On Ratification of the Paris Agreement” on October 2, 2018 and the entry into force of this agreement on December 9, 2018 are some of the efforts aimed at preventing climate change in our country. For example, Uzbekistan’s main obligation under the Paris Agreement is to reduce its greenhouse gas emissions per unit of gross domestic product by 10% below 2010 levels by 2030, or to take measures and actions to mitigate and adapt to climate change in Uzbekistan by 2030. The implementation of this agreement at the national level is being actively carried out and is making a significant contribution to the development of the economy of Uzbekistan. [21].

In accordance with the Resolution of the President of the Republic of Uzbekistan No. PQ-4477 dated October 4, 2019, the “Strategy of the Republic of Uzbekistan for the Transition to a “Green” Economy for 2019-2030” was approved.

In accordance with the Action Plan (Roadmap) of this Strategy, each ministry and department is assigned tasks to mitigate or adapt to climate change. Today, the rapid growth of the world's population and the need to reduce morbidity and mortality associated with global climate change are gaining urgent importance not only in the region, but also internationally. [4, 5]. Also, according to the forecasts of the United Nations (UN) and the World Health Organization (WHO), the total number of deaths in the world will reach 90 million in 2048. This problem requires providing the population with quality medical services, expanding access to them, and stabilizing and improving the ecological state of regions in order to strengthen the health of the population, increase well-being and average life expectancy in the future.

In the world, special attention is paid to medical-geographical research assessing the territorial aspects of population health and diseases, especially to identifying correlations between population longevity, mortality and morbidity indicators, and geographical factors, which ensure a direct connection between health and ecology. [14].

In this regard, priority is given to determining the relationship between natural factors and the origin of diseases, classifying specific types of diseases that occur under their influence, using mathematical-statistical and GIS methods to identify disease foci, and achieving comprehensive solutions for the spread and prevention of diseases. In our republic, a number of reforms are being implemented to further strengthen the health of the population, modernize the healthcare sector, reduce the constantly increasing types of diseases, and protect motherhood and childhood, and certain positive results are being achieved.

In particular, the Development Strategy of New Uzbekistan for 2022-2026 sets out important tasks such as "On eliminating existing environmental problems that harm the health and gene pool of the population" and improving mechanisms for assessing the level of environmental pollution, monitoring the environment, forecasting its pollution level, providing state environmental control with constant information, and monitoring the state of polluting sources and their impact on the environment. [6]

In this regard, we can note that significant scientific and practical importance is attached to reducing maternal mortality by one third by 2030, halving mortality among newborns and children under five years of age, reducing the level of infection of the population with tuberculosis and HIV, ensuring the fight against water-borne hepatitis and other infectious diseases, and improving measures to combat cardiovascular, oncological, diabetes, and chronic respiratory diseases among the population.

Conclusion. In conclusion, it should be noted that today natural or socio-economic factors play a major role in the occurrence of diseases. Diseases in humans occur only when the interaction and balance between external environmental factors and the organism are disrupted. Therefore, studying the effects of endogenous or exogenous factors that cause this is of great practical importance.

Endogenous factors include nervous and mental disorders, infections and intoxications, metabolic disorders, hereditary or developmental defects of certain organs, etc. Exogenous factors include socio-economic factors, unfavorable working conditions, high and low temperatures. It should be noted that the purpose of geographical zoning is to determine whether climate has an effect on the spread of diseases, and to develop recommendations for preventing diseases caused by climate change.

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THE IMPORTANCE OF THE NAKSHBANDI-MJADDIDI ORDER IN INCREASING THE SOCIAL AND PHILOSOPHICAL ACTIVITY OF YOUTH IN UZBEKISTAN

Abstract: *This article discusses the essence of Sufism and its introduction into India. It also discusses a brief history of these orders, their regional significance, and theology .*
Keywords : *Sufism, India, order, Chishtiya order, Naqshbandi-Mujaddidiya order* ***,*** *kalam science and the like.*

Today, in a context of rapid reforms in our country, it follows that studying Islamic theology and deeply studying the factors that influenced the emergence of theology in the medieval Islamic world are among the important social demands. After all, we must not forget that we are **children** of a country that is a leader in Sufism, as in many other fields of science and enlightenment [40].

By the beginning of the 9th century, the theoretical foundations of Sufism were developed, the practical spiritual and psychological exercises of Sufis, methods of self-education and self-cultivation were formed, the concepts of tariqat, enlightenment, and truth emerged, and a set of views on these three parts of Sufism was formed - Sufism was established as a separate science.

this regard, Islamic scholar Raghib Sarjani emphasizes that the word " knowledge" has come absolutely without restrictions and regulations in the Book of Allah and the Sunnah of the Prophet. Therefore, knowledge **is** the prosperity of the country, the goodness of the world, and the happiness of both worlds for humanity [41].

Based on this approach, it is important to study the factors, sciences, and movements that developed Islamic theology and formed complete theological approaches within it.

Although the formation of Sufi schools was initially associated with the widespread Islamic regions such as Kufa, Baghdad, Basra, and Egypt, later, by the 11th and 12th centuries, independent orders such as Yassawiyya, Kubrawiyya, and Khojagon, which were widely recognized throughout the Islamic world, also emerged in Central Asia . The responsibility of the sheikhs of the order for the spiritual and political development of society later became a tradition for other orders as well. The activities of the sheikhs of the Sufi orders in Central Asia had a great impact on the social, political, and religious situation of the region.

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Khojagon The order dates back to the 14th century . Come , Bahauddin. Naqshbandi by further improved . This is Medium In Asia Mongols from the reign next religious-spiritual of life new in the direction to the formation basis It was from the 14th-15th centuries . starting this sect representatives society socio-political in life active they started participating .

Over a certain period, representatives of one or another sect not only gained their position in socio-political life, but also created the basis for their entry into other countries.

"Speaking of this," says the President of the Republic of Uzbekistan Shavkat Mirziyoyev. "There are many examples, such as the gradual development of the Great Silk Road and trade relations, the works of our great scholars and writers of the past dedicated to India, the Babur dynasty that operated in this country, and the widespread spread of the Naqshbandi order founded by Bahauddin Naqshband in the Indian lands."

From this perspective, it can be recognized that the presence of Sufism was a driving force in the spread of Islam throughout South Asia. The penetration of Islam into India is due to the Sufi mystical traditions of the Delhi Sultanate in the 10th-11th centuries, and then spread throughout all parts of India. It is known that chronologically in terms of separated standing initial Delhi Sultanate Turkish and Afghan countries from the rulers consists of was . His as a result South Asia Islam wide spread and culture study for conditions since creation is a sign .

Oriental scholars acknowledge It is believed that poetry played an important role, no less than religious and scientific sources, in popularizing the principles of Sufi philosophy . In this regard, the works of the brilliant, mystical poet Khusrau were very useful in the field of promoting Sufism, especially in the conditions of multinational India.

"The rulers of the time respected and respected the great gurus who had already spread their fame throughout the Muslim and Indian worlds and had countless admirers, and they listened to their advice and carried out their activities. One of those great people was , cleaning order representative "Amir Khusraw is Dehlavi [42]. "

Hazrat Alisher Navoi emphasizes in his work "Nasayim ul-muhabbat" that " Khusraw Dehlavi and Hasan Dehlavi are his (i.e. Sheikh Nizamuddin Awliya) disciples . "[43]

Islam, according to Sufis, has had a lasting influence on syncretic values, literature, and education. Sufi preachers , merchants in appearance to the sea travel and trade through To Gujarat enter This is Sufism . slowly slowness with this in the area Islam religion with related processes to the population propaganda first organizational events organized known does . Divine spirituality , cosmic harmony , love and humanitarianism about Sufism teachings simple to people strong impact

[42] " Women and girls in the development of science, education, culture and innovative technologies" on the topic of achievements International scientific and practical conference materials . Jizzakh. 2019. - B. 311

[43] Alisher Navoi. Complete Collection of Works. Seventeenth Volume. "Nasayim ul-muhabbat". –T.: Fan, 2001. –P. 355.

showed . Islam mystical concepts in distribution help gave and India Sufism culture modern to the epicenter to convert above factors reason We believe it was .

The fact that Bahauddin Naqshbandi has followers in both Eastern and Western countries is a testament to his continued influence. Because Bahauddin Naqshbandi , first of all , Islam religion Sharia criteria tight caught and their to the violation road Secondly , he is truly human . qualities previously driven by society various representatives between futuvwat – youthfulness promote did . This behind people to each other material and spiritual help give those who started , in life difficulty in solidarity overcome Passing by , joys together share those who have seen . Of these all Bahauddin Naqshbandi in society build to do was order , unity exactly himself/herself was .

The sources state that the Naqshbandi order was called by various names - "Siddiqiya", "Tayfuriya", "Khojagoniya", "Naqshbandiya", "Naqshbandiya-Ahrariya", "Naqshbandiya-Mujaddidiya", "Naqshbandiya-Mazhariyya", "Naqshbandiya-Kholidiya", and then the name "Naqshbandiya" itself became fixed. Some of these are associated with the names of sheikhs who left a certain mark on the development of the science of Sufism, such as Abu Bakr, Abu Yazid Bistami, Ubaydullah Ahrar, Shamsiddin Mazhar, Khalid Ziyovuddin Baghdadi, while others, for example, Khojagoniya - Yusuf Hamadoni and one of his students Abdukhaliq Ghijduvani, Mujaddidiya - Imam Rabbani Ahmad Farouk Sirhindi. The Chishti and Naqshbandi-Mujaddid orders attempted to base their doctrinal foundations on the philosophy of the word.

In the Encyclopedia of Islam, theology is defined as a movement that seeks to substantiate Islamic religious doctrine [44]. Also, by the time the science of theology emerged, it was no longer possible to be satisfied with only providing evidence from the Quran and Sunnah in matters of faith, as in previous times. The opposing side demanded that intellectual evidence be provided as well. During this period, Islamic sciences and ideas flourished, and the science of theology, which constitutes one of the components of this science, also entered the flowering period of its development.

At the same time, as in all sciences, freethinking became widespread in Islamic sciences, and the tendency to freely express one's views and opinions based on evidence and proof increased [45]. Especially since it had emerged long before this, it would cause various conflicts and disagreements in Transoxiana, like in most countries.

of theology was initially formed in the process of mutual discussions between various political and religious sects existing in Islam and disputes with representatives of other religions. In the early stages of the Islamic era, the religious and legal foundations of society were formed by the national cultures of different religions and peoples. As in other religions, the theoretical and legal aspects of Islam began to take shape in later centuries. Because this religion managed to unite non-Arab - non-Arab peoples around itself in the Middle Ages. Therefore, when creating

[44] Islam encyclopedia . - Tashkent : Uzbekistan national encyclopedia DIN, 2004. -B. 134.
[45] Allamas of the great country and to the publication preparer Ubaidullah Uvatov . - Tashkent : NMIU of Uzbekistan , 2016. -B. 96.

the religious and legal doctrine of Islam, it was necessary to take into account the interests of representatives of different nations and races who accepted this religion.

Philosophers themselves see the main difference between theology and philosophy in the method of reasoning: while philosophy uses apodictic (evidence-based) reasoning, the method of inference, that is, dialectical reasoning, is used in theology. Both theology and philosophy pay great attention to epistemological, epistemological, and methodological issues. The task of theology is to scientifically substantiate the correctness of Islamic beliefs, which are inherent in the human heart and serve to eliminate doubts and suspicions about faith and belief, through intellectual arguments. Theology is also considered an important science within Islamic knowledge that can be used as a method of argumentation, thinking (nazar), and reasoning (istidllo al-aqil) in the process of research to logically prove religious beliefs revealed through revelation [46].

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SEMEMAS, NOMEMAS, AND THE BUILDING BLOCKS OF LANGUAGE

Abstract*. This article delves into two crucial concepts in linguistics: sememas and nomemas. Sememas represent the core meanings of words, while nomemas encompass the grammatical and functional roles they play within sentences. By understanding how these elements interact, we gain deeper insights into the flexibility and complexity of human language. Through everyday examples, we'll see how these seemingly abstract ideas shape our ability to communicate effectively.*

Keywords*: semema, nomema, grammatical structure, nomemas function*

Introduction

We use language so effortlessly that we rarely stop to consider its intricate mechanics. But beneath the surface of everyday conversation lies a fascinating interplay of meaning and function. Linguists have long explored the building blocks of language, and two concepts that stand out are sememas and nomemas. These terms may sound technical, but they represent the essential elements that allow us to combine words into meaningful and grammatically correct sentences. In this article, we will demystify sememas and nomemas and reveal how they contribute to the richness and expressiveness of human communication.

Methods

This article draws on established linguistic theories, particularly those within structural and functional linguistics. We will examine how these theories define and differentiate sememas and nomemas. The analysis will be presented through illustrative examples, highlighting how these concepts are observable in everyday language use. This article is primarily descriptive and explanatory, rather than based on quantitative data analysis, aiming to make these concepts accessible to a general audience.

Results

Sememas: The Core Meanings of Words

At the heart of every word lies a **semema**. This term refers to the core, abstract meaning of a word, independent of its grammatical context. Think of it as the essential semantic component that allows us to distinguish between different words. The semema represents what a word *signifies* in the world.

For example, the semema of the word "cat" involves the concept of a small, domesticated feline animal. This semema remains relatively constant whether we say "The cat is sleeping" or "I saw a cat." The semema carries the core meaning that identifies this animal. Crucially, sememas are not just single, fixed definitions. They can be complex, encompassing various nuances and associations.

Here are some important features of sememas:

- **They are abstract:** Sememas are mental representations of meaning, not physical objects or events.
- **They are relatively stable:** While word meanings can change over time, sememas are generally stable within a particular time and language community.
- **They interact with context:** While the core meaning is consistent, the precise interpretation of a semema can be influenced by the context in which it's used. For example, the semema of the word "run" has slightly different meanings in "I run every day" and "The machine is running".

Nomemas: Grammatical Roles and Functions

While sememas provide the core meaning, **nomemas** represent the grammatical and functional roles words play within a sentence. A nomema is not about *what* a word means but rather *how* it functions in the grammatical structure. Nomemas are crucial for understanding how words relate to each other and contribute to the overall meaning of a sentence.

Nomemas encompass concepts like:

- **Nouns:** Which typically act as subjects, objects, or complements (e.g., *cat*, *table*, *idea*)
- **Verbs:** Which express actions or states of being (e.g., *run*, *sleep*, *be*)
- **Adjectives:** Which modify nouns (e.g., *big*, *red*, *happy*)
- **Adverbs:** Which modify verbs, adjectives, or other adverbs (e.g., *quickly, very, carefully*)
- **Prepositions:** Which show relations between other words (e.g., *in*, *on*, *under*)

For example, in the sentence “The *cat slept* on the *mat*,” "cat," "slept," and "mat" have distinct sememas (a feline animal, a state of being asleep, and a piece of floor covering, respectively). However, they also have different nomemas: "cat" and "mat" act as nouns, while "slept" acts as a verb.

Here's what makes nomemas interesting:

- **They are functional:** Nomemas explain the role of words in sentences, not their meanings.
- **They are language-specific:** The ways in which nomemas function can vary greatly between languages (e.g., word order is crucial in English but more flexible in other languages).

- **They are essential for grammar:** Nomemas allow us to construct grammatically correct sentences, adhering to the structural rules of a language.

Let's see how sememas and nomemas interact in different contexts:

- **The word "book":** The semema of *book* is related to a bound collection of printed pages. However, the nomema of "book" varies depending on how it's used. In "I read a book," it functions as a noun (object), but in "I will book a hotel," it functions as a verb.
- **The sentence "The boy quickly ran."** The semema of "boy" is related to a young male, and it acts as a noun (subject). The semema of "ran" is related to movement on foot, and it acts as a verb. The semema of "quickly" refers to rapid action, and it acts as an adverb modifying the verb.
- **The word "run":** As mentioned earlier, the semema remains relatively consistent, but its nomema can change. “The run is long" (noun), “I run every day” (verb).

Discussion

Sememas and nomemas work in tandem to enable human communication. Sememas give us the core meaning, allowing us to understand the conceptual content of a word, while nomemas provide the grammatical scaffolding for constructing complex sentences. Together, they help us not only comprehend the meaning of individual words but also how words combine to create larger and more complex ideas.

The interplay between sememas and nomemas highlights the inherent flexibility of language. We can use the same words in different grammatical roles and with different contextual nuances, allowing us to express a wide range of ideas with a relatively limited vocabulary. This versatility is a testament to the sophistication of human linguistic abilities. Understanding these concepts provides a valuable perspective on the design of language.

Conclusion

Sememas and nomemas, though seemingly abstract, are fundamental to our ability to understand and generate language. Sememas are the building blocks of meaning, while nomemas are the blueprint for how words combine grammatically. By unpacking these elements, we gain a greater appreciation for the elegant structure of language. Understanding these underlying principles gives us insights into the mechanisms behind our communication skills. These concepts reveal that language is not merely a collection of words but a dynamic system of meaning and function working together.

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MUTAXASSISLARNI TAYYORLASHDA TRENAJYOR-SIMULYATORLARNING AHAMIYATI

Annotasiya: *maqolada trenajyor va simulyatorlarga ta'rif berilgan, shuningdek xorijda va mamlakatimizda turli sohalarda trenajyor va simulyatorlardan foydalanish amaliyoti ko‘rib chiqilgan. Kasbiy tayyorgarlikning muhim yelementi sifatida trenajyor va simulyatorlarning ahamiyati ko‘rsatib o‘tilgan. Mutaxassilarni tayyorlashda trenajyor-simulyatorlardan foydalanishning samaradorligini oshirish bo‘yicha takliflar tayyorlangan.*

Kalit so‘zlar: *o‘quv-moddiy baza; trenajyorlar; simulyatorlar, virtual voqeylik simulyatorlari, ta’lim muhiti.*

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THE IMPORTANCE OF SIMULATORS IN THE TRAINING OF SPECIALISTS

Abstract: *the article defines simulators and simulators, and examines the practice of using simulators in various industries abroad and in our country. The importance of simulators as a defining element of professional training is emphasized. Proposals have been prepared to improve the efficiency of using simulators in the training of specialists.*

Keywords: *educational and material base, simulators, virtual reality simulators, educational environment.*

Kirish. O‘zbekiston Respublikasi aholisining barcha qatlamlarini favqulodda vaziyatlardan muhofaza qilish va to‘g‘ri harakat qilishga tayyorlash tizimining barqarorligi va sifati, o‘quv muassasalarining va aholi qatlamiga mos keladigan dasturlarning mavjudligiga, o‘qitishda qo‘llanilayotgan usul va uslublarga, uslubiy ta’minotga, o‘qituvchilarning tayyorgarligi va o‘quv-moddiy bazaning holatiga bog‘liq.

XX asrning 50-yillaridan boshlab trenajyor va simulyatorlar transport, energetika, harbiy, meditsina, favqulodda vaziyatlardan muhofazalanish va boshqa sohalarda kasbiy tayyorgarlikning eng muhim elementi sifatida keng miqiyosda qo‘llanib kelinmoqda. Ushbu qurilmalar bo‘lajak mutaxassislarning hayoti va ish faoliyatidagi voqelikni sun'iy yaratish imkonini beradi. Bu esa o'z navbatida tinglovchilarda kasbiy ko'nikmalarni shakllantirishni ta'minlaydi.

Ushbu maqolaning maqsadi – xorijiy davlatlarda ta'lim sohasiga trenajyorlar va simulyatorlarni tadbiq etish bo'yicha amalga oshirilayotgan ishlarni tahlil qilish hisoblanadi. Xorijlik mutaxassislarning simulyatsiya tayyorgarligiga bag'ishlangan ishlarini o'rganish orqali orqali, quyidagi tadqiqot savollarga javob topish nazarda tutilgan:

mutaxassislik simulyatorlarining tavsifi (on-hands, job-place simulations), kasbiy tayyorgarlik usullari orasida ularning o'rni, o'ziga xos ta'lim muhiti (learning environments) sifatida ularning farqi;

mutaxassislik simulyatorlarining pedagogik salohiyati; ta'lim oluvchilarning umumiy va maxsus kopetensiyalarni shakllantirishni samarali ta'minlash imkoniyatlari;

zamonaviy mutaxassislik simulyatorlari qanday texnologik poydevorga asoslangan; ta'lim maqsadlariga erishishni ta'minlaydigan real holatni modellashtirish jarayonlari qanday texnologik yechimlar orqali ta'minlanadi.

Mavzuga oid adabiyotlar tahlili. Ta'kidlash lozimki, tadqiqotlar natijalari, trenajyor-simulyatorlar mutaxassislarni tayyorgarlashda muhim rol o'ynshini ko'rsatmoqda, jumladan Ingliz olimlari A.Martinez, F. & Lopezlar 2024 yil (Future of Safety) nomli jurnalida chop etgan "Future Trends in Earthquake Training Technologies" nomli, AQShlik olimlar S.Green, J. & Thompsonlar 2022 yil (Innovation in Disaster Management Journal) nomli jurnalida chop etgan "Innovations in Earthquake Preparedness Training" nomli ilmiy maqolalarida kelgusidagi tadqiqotlar yangi texnologiyalarni, masalan, IoT va AIni integratsiya qilishga qaratilgan bo'lishi mumkinligi, bu yanada samarali o'qitish tizimlarini yaratishga yordam berishi, shuningdek, mavjud trenajyorlardan foydalanishni takomillashtirish muhim hisoblanishini ilmiy jihatdan asoslab bergan [9, 10].

Yurtimiz olimlari G'.O.Mavlonov, M.T.O'razboyev, Q.N. Ablullabekov, V.A.Ismoilov, N.N.Nishonov, V.I.Ulomov, N.A.Aripova, B.Y.Kurbanov va boshqalar ushbu sohada tadqiqotlar olib borib, turli yillarda o'z tadqiqotlari asosida muhim nazariy va amaliy natijalarga erishganlar.

Tadqiqot metodologiyasi. Tadqiqot jarayonida qiyosiy usul, analiz va sintez usuli, induksiya va deduksiya usullari, tadqiqot natijalarini umumlashtirish kabi usullardan foydalanilgan.

Trenajyor so'zining lo'g'aviy ma'nosi ingliz tilidan train – tarbiyalash, o'qitish, mashq qildirish deb tarjima qilinadi. Trenajyor - bu har xil turdagi yuklarni yoki holatlarni (vaziyatni) sun'iy ravishda taqlid qiluvchi mexanik, dasturiy, elektr yoki kombinatsiyalashtirilgan o'quv-mashq qurilmasidir. Trenajyorlar tinglovchilar tomonidan bajaradigan muayyan ish siklini mashq qildirishni, mashinani (mexanizmni) boshqarish bo'yicha bilim va amaliy ko'nikmalarni takomillashtirishni ta'minlaydi. Ular o'quv (immitatsiya qiluvchi) va sport trenajyorlariga bo'linadi. Trenajyorlar tinglovchilarning moddiy obyektni boshqarish uchun zarur bo'lgan kasbiy bilim va ko'nikmalarini shakllantirish va takomillashtirish uchun mo'ljallangan, o'rganuvchining haqiqiy obyektni boshqarishga xos bo‘lgan harakatlarini takroran bajarish uchun mo‘ljallangan texnik vosita [1].

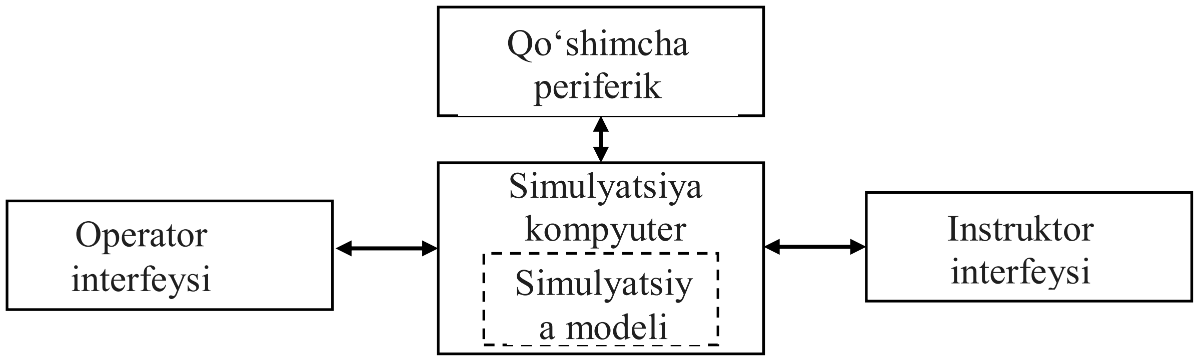
Simulyator - imitator (odatda mexanik yoki kompyuter), uning vazifasi qandaydir jarayonnni, apparat yoki transport vositasini boshqarishni taqlid qilishdir. Hozir ko‘pincha "simulyator" so‘zi kompyuter dasturlariga (odatda o‘yinlarga) nisbatan qo‘llaniladi. Kosmik kema (samolyot, tezyurar poyezd) salonining ichki qismini mutlaqo aniq takrorlaydigan kompyuter-mexanik simulyatorlarda kosmonavtlar, uchuvchilar, mashinistlar tayyorgarlikdan o‘tkazilsa, sun’iy zilzilalarni hosil qilish imkoniyatiga ega bo‘lgan zilzila simulyatorlari fuqarolarni zilzila vaqtida to‘g‘ri harakat qilishga tayyorlashga mo‘ljallangan.

Rus tilidagi adabiyotlarda “trenajyor” va “simulyator” tushunchalari sinonim so‘zlar sifatida ishlatiladi, texnik tizimlarni ishlab chiquvchilar esa ularni ekvivalent sifatida qo‘llashadi: aviatsiya, muxandislik, harbiy va boshqa sohalarda qo‘llaniladigan trenajyor komplekslari simulyator deb nomlanadi, kasbiy tayyorgarlikning tegishli uslubi “Simulyatorlarga asoslangan kasbiy o‘qitish” (simulation-based training) deb nomlanadi [1]. Trenajyor deganda nafaqat kasbiy ko‘nikmalarni shakllantirish va mustahkamlash uchun xizmat qiladigan vosita, shuningdek bilimlarni egallashga, turli qobiliyatlarni shakllantirishga hissa qo‘shadigan har qanday o‘qitish usullari va vositalari tushiniladi. Masalan, Rossiya Federatsiyasida maktablarda matematikani, rus va ingliz tillarini o‘rgatishga, test sinovlarini topshirishga o‘rgatishga mo‘lajallangan trenajyorlar [2], oliy ta’lim muassasalarida talabalarga oliy matematika va materiallar qarshiligi [3], spektral tahlil [4] kabi fanlarni egallashlariga ko‘maklashuvchi trenajyorlar va boshqa shunga o‘xshash o‘qitish tizimlari o‘quvchilar va talabalarda turli o‘quv vazifalarini yechishda mustahkam ko‘nikmalar hosil qilish maqsadida qo‘llanib kelinmoqda.

Shunday qilib, berilgan mavzu bo‘yicha tipik amaliy muammolarni hal etishga mo‘ljallangan kompyuter savolnomalari va amaliyotlari ham trenajyorlar deb nomlanib kelinmoqda [1]. Kompyuter trenajyorlari texnik o‘qitish vositalarining o‘ziga xos turi hisoblanib, ta’lim jarayonida ularni samarali qo‘llash orqali ta’lim sifati va samaradorligini keskin oshirishga erishiladi.

Yuqorida keltirilgan yondashuvga nisbatan torroq yondashuv mavjud bo‘lib, bunda trenajyorlar xodimlarni kasbiy tayyorgarligi samaradorligini oshirish vositasi sifatida qaraladi. Trenajyorlar motor ko‘nikmalarni rivojlantirish (transport vositalarini boshqarish, tibbiy manipulyatsiyalar, qurollardan otish va boshqalar), farqni aniqlash maqsadida keng qo‘llanib kelinmoqda (texnika va tibbiy diagnostika). Bundan tashqari ushbu o‘quv tizimlari ijrochidan algoritm bo‘yicha xatosiz harakatlarni bajarish talab qilinganda samarali hisoblanadi (masalan: aviatsiya dispetcherlari va elektrostansiyalar operatorlari harakati). Trenajyorlarning ahamiyati mutaxassislarni g‘ayritabiiy va favqulodda holatlarda qimmatbaho va xavfli komplekslarni boshqarishga tayyorlashda yana ham ortadi (uchuvchilar, navigatorlar, atom elektrstansiyalari operatorlari, burg‘ulash qurilmalari, kimyo zavodlari operatorlari va boshqalar) [5].

Kasbiy vazifalarni bajarish ijrochilarning hayotida kundalik xavf bilan bog‘liq bo‘lgan hollarda (masalan, qutqaruvchilar, harbiy xizmatchilar) trenajyor amaliyoti o‘qitishning eng muhim vositasiga aylanadi, uning samaradorligiga jangovar holatda shaxsiy tarkibning omon qolishi bevosita bog‘liq bo‘ladi. Shuning uchun ham, bugungi kunda barcha turdagi qo‘shinlarning jangovar tayyorgarligi muntazam ravishda juda ko‘p turli maqsadlarda qo‘llaniladigan trenajyorlardan foydalanishni o‘z ichiga oladi. U yoki bu sohada mutaxassislarni tayyorlashga mo‘ljallangan barcha zamonaviy trenajyor komplekslarining umumiy tuzilishi 1-rasmda keltirilgan.



1-rasm. Zamonaviy trenajyor komplekslarining umumiy tuzilishi [6].

Trenajyorlar uchta zarur qismga ega bo‘lishi lozim:

konstruktiv qism (operator ish joyining aniq nusxasi); dasturiy ta’minot qismi (uskunalar va jarayonlarning mos modeli); didaktik qism (operator harakatlarini baholash va monitoring qilish dasturi va boshqa turli darajadagi muhim xizmat dasturlarini o‘z ichiga olgan o‘qituvchining ish joyi).

Trenajyorlarning asosiy tarkibiy elementlari quyidagilardir:

kirish-chiqarish tizimi orqali operator interfeysiga ulangan modellashtiruvchi kompyuter, shuningdek, simulyatorda o‘qitish jarayonida simulyatsiya qilinadigan real obyektlar va faoliyat tizimlarini tavsiflovchi simulyatsiya modeli. Ushbu model haqiqiy obyektni boshqarish bo‘yicha operatorning ishlashi paytida yuzaga keladigan holatlarga o‘xshash shartlar va omillarni sun’iy ravishda takrorlashni ta’minlaydi [6]. Shu bilan birga, simulyator nafaqat texnik obyektlar va tizimlarning faoliyatini, balki ularning ishlashining tashqi muhitini ham simulyatsiya qiladi. Bundan tashqari, u operator ko‘rgan va his qiladigan hamma narsani takrorlaydi;

operator interfeysi talabaga texnik tizimning boshqaruv elementlarini haqiqiy ishlab chiqarish jarayonida bo‘lgani kabi boshqarish imkonini beradi. Operatorning faoliyati, shu jumladan uning g‘ayritabiiy va favqulodda vaziyatlardagi harakatlari batafsil tartibga solinadi. Bu faoliyatning sifati ishlash, ishonchlilik, intensivlik, xatolik nuqtai nazaridan aniqlanadi[6];

o‘qituvchi interfeysi, uning yordamida o‘qituvchi o‘quv ssenariysini va simulyatsiya qilingan jarayonning dastlabki holatini tanlaydi, uning parametrlarini o‘zgartiradi yoki atrof-muhit sharoitlarini o‘zgartiradi, tanqidiy va favqulodda vaziyatlarni belgilaydi va hokazo. Talabalarning harakatlari haqidagi ma’lumotlarga asoslanib, murabbiy mashg‘ulot natijalarini tahlil qiladi, kursantlar tomonidan yo‘l qo‘yilgan xatolarni tahlil qiladi, topshiriqlarni bajarish tezligini va ularning murakkablik darajasini o‘zgartiradi;

simulyatsiya qilingan ish joyining haqqoniyligini oshirish uchun zarur bo‘lgan asboblar paneli, turli qurilmalar, qo‘shimcha periferik uskunalar.

Tahlil va natijalar. Tahlil shuni ko‘rsatadiki, o‘tgan asrning 90-yillaridan boshlab kasb-hunar ta’limida simulyatorlardan tobora ko‘proq foydalanilmoqda. Iqtisodiyotning turli sohalari vakillari kasbiy faoliyatni sun’iy ravishda taqlid qilish tizimi yuqori kurs talabalari va o‘z faoliyatini endi boshlayotgan yosh xodimlarni tayyorlash uchun juda samarali bo‘lishi mumkinligini ta’kidlashmoqda. Haqiqiy ishlab chiqarish jarayoniga hali kirish imkoniga ega bo‘lmagan holda, ular murakkab birliklar, mashinalar va boshqaruv tizimlarining maketlari va "raqamli egizaklari" bilan o‘zaro aloqada bo‘lish orqali bebaho tajribaga ega bo‘lishadi.

Simulyatorlardan foydalanish faol va interaktiv ta’limning boshqa shakllari qatorida kasbiy ta’lim va kasb-hunar ta’limi sifatini oshirishga yordam beruvchi vosita sifatida qaraladi. Zamonaviy IT-yechimlar simulyatorlarning ta’lim salohiyatini oshiradi, bu esa o‘quvchilarning keyinchalik ishlashi kerak bo‘lgan sharoitlarni aniqroq takrorlash imkonini beradi. Biroq, texnologik imkoniyatlarning kengayishi o‘z-o‘zidan bu tizimlarning ta’lim tashkilotlarida ommaviy joriy etilishini kafolatlamaydi.

Ommaviy kasb-hunar ta’limi uchun simulyatorlarning vazifalari nimadan iborat, qaysi hollarda ulardan foydalanish pedagogik nuqtai nazardan samarali va shu bilan birga iqtisodiy jihatdan oqlanadi - bu savollar hali ham ochiqligicha qolmoqda va trenajyorlar yangi sohalarga kirib kelganida yana bir marta kun tartibiga chiqadi. Ulardan foydalanish samaradorligi birinchi qarashda aniq ko‘rinmaydi va har safar alohida asoslashni talab qiladi.

Kasbiy tayyorgarlikning ushbu segmentida simulyatorlardan foydalanish samaradorligi qo‘shimcha tadqiqotlarni talab qiladi. kasbiy ta’lim didaktikasi asoslarini aniqlamasdan turib trenajyorlarni keng joriy etib bo‘lmaydi. A.Xalid va uning hamkasblari ta’kidlaganidek, haligacha ta’limida trenajyorlarni qo‘llash to‘liq asoslanmagan. [7].

Ta’limda qo‘llaniladigan simulyatsiyalarining kelajakdagi istiqbollarini muhokama qilishda ularni loyihalash va qo‘llash ta’lim nuqtai nazaridan mazmunli bo‘lgan kontekstlarni aniqroq aniqlash lozim. Simulyatorlar asosida hal qilingan muammolar, trenajyor mashg‘ulotlari natijasida hosil bo‘lgan natijalarni kengroq ko‘rib chiqish talab etiladi [8].

Simulyatorlar yordamida o‘qitishning an’anaviy modeli D.Dyui konsepsiyasiga muvofiq shakllantirilgan. Bu tinglovchilarda ma’lum bir ish joyini egallash uchun zarur bo‘lgan kasbiy ko‘nikmalarni shakllantirishni ta’minladi. Bunda simulyatorlar asosida kasbiy tayyorgarlikni tashkil etishning yetakchi uslubiy tamoyillari amalda o‘rganish, shuningdek, o‘qituvchidan fikr-mulohazalarni olish edi. Tinglovchilarning harakatlari batafsil tartibga solingan; "faoliyatga kirishish" vazifasi mashinaning ishlashini yoki murakkab texnik tizimning ishlashini ta’minlaydigan mehnat harakatlari va qarorlar qabul qilish algoritmlarini o‘zlashtirish sifatida talqin qilinardi. O‘quv jarayonida instruktorning roli ustun edi.

Bugungi kunda simulyatorlardan amaliy mashg‘ulotlar uchun vosita sifatida loyihalash, ulardan foydalanish dolzarb bo‘lib qolmoqda. So‘nggi o‘n yillikda simulyatorlar asosida o‘qitish tizimlarini ishlab chiqish butunlay boshqacha yo‘nalishni egalladi. Simulyatorlarning funksionalligi AQSH, G‘arbiy Yevropa va Xitoy tadqiqotchilari tomonidan konstruktiv pedagogika nuqtai nazaridan baholanmoqda.

Ushbu konsepsiya doirasida bilim o‘qituvchi tomonidan o‘quvchiga unchalik ko‘p berilmaydi, balki o‘quv jarayonida uning o‘zi tomonidan yaratiladi va quriladi. Bunday ta’lim samaradorligining yeng muhim sharti - talabaning mustaqilligi va faolligi, o‘z faoliyatini tashkil yetish qobiliyati, kasbiy muammolarni ongli va mas’uliyat bilan hal qilish qobiliyatidir. Kasbiy ta’lim va o‘qitish jarayoni ko‘rib chiqiladigan konseptual asosning o‘zgarishi bilan trenajyorlarni o‘qitishga qo‘yiladigan funksional talablar ham o‘zgaradi.

Xulosa va takliflar.

Yuqoridagi fikr va mulohazalarni umumlashtirib quyidagicha xulosa qilish mumkin:

- professional simulyator endilikda talabaga yuqori darajadagi erkinlikni ta’minlovchi, sinov va xatolikka yo‘l qo‘yadigan va shu asosda kasbiy identifikatsiya qilish uchun imkoniyatlar yaratadigan vosita sifatida qaraladi;
- zamonaviy trenajyor-simulyator talaba faoliyat yuritadigan moddiy muhitni vitual yaratish uchun emas, balki kasbiy faoliyat tuzilishi va professional faoliyati davomida u hal qilishi kerak bo‘lgan ishlab chiqarish vazifalarini modellashtirishga xizmat qilishi lozim.

Mutaxassilarni tayyorlashda trenajyor-simulyatorlardan foydalanishning samaradorligini oshirish bo‘yicha quyidagilar taklif etiladi:

- yangi texnologiyalarni rivojlantirish va joriy etish: mavjud trenajyor-simulyatorlarni takomillashtirish va yangilarini ishlab chiqishda sun’iy intellekt, mashinaviy o‘rgatish kabi yangi texnologiyalarini joriy etishni davom ettirish, ularni yaratishda so‘nggi ilmiy ma’lumotlar va xavfsizlik tendensiyalarini hisobga olish;
- trenajyor-simulyatorlardan foydalanishni kengaytirish: trenajyor-simulyatorlardan nafaqat ta’lim muassasalarida foydalanishni yo‘lga qo‘yish, balki ishlab chiqarish va xizmat ko‘rsatish sohasida ham qo‘llash maqsadga muvofiq;
- tadqiqotlar va baholashlar o‘tkazish: trenajyor-simulyatorlarning samaradorligini oshirib borish uchun doimiy ravishda ilmiy tadqiqotlar va baholashlar o‘tkazib borish;

Xulosa o‘rnida o‘uni ta’kidlash mumkinki, simulyatorlarni kasbiy ta’lim amaliyotiga chinakam integratsiya qilish va ulardan haqiqatan ham samarali foydalanish uchun bir qator psixologik, pedagogik, didaktik, tashkiliy va texnologik muammolarni hal qilish kerak bo‘ladi. Ushbu muammolarni shakllantirish va hal qilish zamonaviy raqamli pedagogikaning muhim vazifalari hisoblanadi.

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XALQARO SAVDONING ILMIY-USLUBIY ASOSLARI

Annotatsiya: *Maqolada tashqi savdo nazariyasining vujudga kelishi, unda merkantilizm va klassik maktablarining roli tahlil qilingan. Shuningdek, jahon resurslaridan unumli foydalanish yo’llari, xalqaro mehnat taqsimoti va ixtisoslashuv jarayonlari, mamlakatlarning ishlab chiqarish omillari bilan ta’minlanganligi va ular narxlarining xalqaro miqyosda nisbiy tenglashuvi o’rganilgan.*

Kalit so‘zlar: *tashqi savdo, eksport, import, xalqaro savdo, mehnat taqsimoti, ixtisoslashuv, ishlab chiqarish omillari, narx, milliy iqtisodiyot, iqtisodiy o‘sish, jahon bozori, jahon iqtisodiyoti, savdo, tadbirkorlik, tashqi to’lov balansi.*

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SCIENTIFIC AND METHODOLOGICAL FOUNDATIONS OF INTERNATIONAL TRADE

Abstract: *The article analyzes the emergence of the theory of foreign trade, the role of mercantilism and classical schools in it. It also studies the ways of efficient use of world resources, the processes of international division of labor and specialization, the provision of countries with factors of production and the relative equalization of their prices on the international scale.*

Key words: *foreign trade, export, import, international trade, division of labor, specialization, factors of production, price, national economy, economic growth, world market, world economy, trade, entrepreneurship, external balance of payments*.

Xalqaro savdo jarayonlarini tadqiq qilish faoliyati dastlab yevropa mamlakatlarida vujudga kelgan bo‘lib, bu boradan dastlab, merkantilizm maktabi namoyondalari faoliyat olib borgan. Ma’lumki, o‘rta asrlar feodalizmining rivojlanish davrida dengiz sayyohati natijasida ko‘plab yutuqlarga asos bo‘lgan buyuk geografik kashfiyotlar yangi qit’alarning ochilishiga va ularni o‘zlashtirishga imkoniyat ta’minlab berdi. Yerkurrasining g‘arbiy yarim sharida o‘sha davrda topilgan katta hajmdagi oltinlar, ulardan pul sifatida foydalanish imkoniyatlarini mislsiz darajada ortishiga olib kelgan. Mazkur jarayonda milliy davlatlar mustahkamlanib, qudrati ortib borgan va ularning kuchlilari asta-sekin kuchsizlarini istilo qilib, o‘zlarining mustamlakalariga aylantirgan hamda ta’sir doiralarini kengaytirish uchun kurash olib borgan. Bu jarayonlar shaharlarning iqtisodiy markazlar sifatida muhim ahamiyat kasb etishiga olib kela boshlagan.

Shunday tarixiy vaziyatda avtarkiya xarakteriga ega bo‘lgan feodal nazariyalardan farq qiladigan va yangi xo‘jalik tizimida tovarning ahamiyatini asoslaydigan hamda milliy davlatlarning boshqa chet mamlakatlarni bosib olishlari zarurligini isbotlashga qaratilgan umuman iqtisodiy nazariyalarga, xususan, tashqi savdo borasidagi qarashlarga ehtiyoj sezilgan. Aynan, Merkantilizm ta’limoti namoyondalari ana shunday nazariyalarni o‘rtaga tashlovchi sifatida yuzaga chiqqan. Zero, Merkantilizm iqtisodiy ta’limotlarning yo‘nalishlaridan biri bo‘lib, uning asosiy g‘oyalari yevropalik olimlar tomonidan ishlab chiqilgan. Ularning ta’limotiga binoan dunyoda cheklangan miqdordagi boyliklar mavjud bo‘lib, mamlakatlarning qudrati ana shu boylikdan olgan ulushiga ko‘ra belgilanadi.

Ko‘proq ulushni qo‘lga kiritgan davlat kuchli, aksincha bo‘lgani esa kuchsiz hisoblangan va shuning uchun jahonda bir mamlakatning boyishi ikkinchisining kambag‘allashuvi hisobiga yuz berishi mumkin deb tushunilgan. Demak, jahonda boylikning ko‘payishi qayta taqsimlash orqali amalga oshirilishi mumkin bo‘lgani uchun har bir mamlakat boshqa mamlakatlarga nisbatan afzallikka erishish maqsadida qudratli iqtisodiyot bilan bir qatorda kuchli harbiy salohiyatga va savdo flotiga ega bo‘lishi talab qilingan. Merkantilistlar savdogarlarni-tadbirkorlarni iqtisodiy tizim muvaffaqiyatining asosi deb bilgan va mehnatni asosiy ishlab chiqarish omili sifatida qabul qilgan.

Shu bois, Merkantilistik maktab namoyondalari mamlakatlarning boyligi oltin va kumush miqdoridan iborat deb qaragan. Shuning uchun tashqi savdo orqali milliy mavqeyini mustahkamlash maqsadida davlat quyidagilarni amalga oshirishi lozimligini tavsiya qilgan. Jumladan:

•tashqi savdoda aktiv balansni ta’minlash;

•ijobiy savdo qoldig‘ini ta’minlash maqsadida eksportni oshirish va importni cheklash uchun tashqi savdoni tarif va notarif vositalar orqali tartibga solish;

•chet elga xomashyo olib chiqishni batamom cheklash, mamlakatda mavjud bo‘lmagan xomashyolarni xorijdan cheklovsiz va bojlarsiz import qilishni rag’batlantirish orqali oltin zaxiralarini ko‘paytirishga va tayyor tovarlar narxini pasaytirishga erishish;

•mustamlakalarning mustamlaka qilgan mamlakatdan boshqa barcha mamlakatlar bilan har qanday savdo aloqasini cheklash va ularning bozorlariga faqat mustamlakachilarda ishlab chiqarilgan tovarlar sotilishini, ularda tayyor tovarlar ishlab chiqarishni cheklash orqali mustamlakalarning xomashyo va oziq-ovqat bazasiga aylantirishni ta’minlash talab etilgan.

Bundan tashqari, hukumat eksportga subsidiyalar ajratgan, istemol tovarlar importiga bojxona bojlari joriy etgan, ayni paytda eksport qilinadigan tovarlarni ishlab chiqarishda ishlatiladigan xomashyolarning importiga boj joriy etilmagan.

Xalqaro savdo nazariyasi uchun merkantilistlarning o‘rni bu, ularning tashqi savdoning mamlakat iqtisodiy taraqqiyotini ta’minlashdagi ahamiyatini ko‘rsatib, bera olishida namoyon bo’ladi. Zero, Merkantilistlar zamonaviy iqtisodiyotda qo‘llaniladigan to‘lov balansi tushunchasini ham birinchi bo‘lib asoslagan va ilmiy muomalaga kiritgan.

Jahonda tashqi savdo masalasini merkantilistlardan keyin klassik maktabining namoyondalari keng va chuqur asosda ratsional tadqiq qilgan hamda ahamiyatini atroflicha ochib bergan. Xususan, A. Smit xalqlar boyligi jamlangan oltin yoki qimmat baho metallarning hajmiga binoan hisoblanmaydi. Balki, mamlakatlarning boyligi ishlab chiqarilgan va yaratilgan pirovard tovar va xizmatlar salohiyatidan iborat bo’lishi kerak ekanligini asoslab bergan. Shuning uchun mamlakatning iqtisodiy faoliyatdan ko’zda tutgan ustuvor vazifasi oltin va boshqa shu kabi noyob metallarga egalik qilishdan iborat emas, balki, eng muhim vazifa milliy iqtisodiyotda xalqaro mehnat taqsimoti va ixtisoslashuvni chuqurlashtirish orqali pirovard mahsulot ishlab chiqarishni rivojlantirishdan iborat ekanligini qayd qilgan.

Klassiklarning ta’limotiga binoan tadbirkorlar iqtisodiy jihatdan to’liq erkin va mavjud huquqiy mezonlar doirasida xohlagan faoliyat turlarini mustaqil tanlash shart-sharoitlariga ega bo‘lgandagina eng muvaffaqiyatli natijalarga erishishi mumkin bo‘ladi. Shu bois ular biznesni rivojlantirish maqsadida tadbirkorlarga qo‘yib bering bajarsinlar, qo‘yib bering o‘zsinlar degan shiorni o’rtaga tashlagan yoki tadbirkorlar erkin bo‘lishi kerakligiga urg’u bergan.

Shuning uchun xalqaro savdo munosabatlarida, bu ta’limot mualliflari, mamlakatlar o‘zlari ishlab chiqarish xarajati yoki unumdorligi borasida afzallikka ega bo‘lgan tovarlarni tayyorlashga ixtisoslashishi va ularni, boshqa tovarlarni ishlab chiqarish borasida xarajat yoki unumdorlik xususida afzallikka ega mamlakatlar bilan ayirbosh qilishlari milliy va jahon farovonligini yuksalishiga olib kelishini bayon qiladi. Shu asosda mutloq afzallik nazariyasining mohiyatiga ko‘ra, mamlakatlar o‘zlari eng kam xarajat bilan ishlab chiqaradigan mahsulotlarni eksport, aksini esa import qilishi maqsadga muvofiqligini tushuntirgan. Natijada, mazkur vaziyat har bir mamlakatning ixtisoslashuviga va eksport qilishiga sharoit yaratadi hamda xalqaro savdo har bir mamlakat uchun manfaatli bo‘lib, jahonda mehnat taqsimotining samarasi ta’minlanadi.

Zero klassiklar tomonidan o’rtaga tashlangan mutlaq afzallik nazariyasining kuchli tomoni bu, mehnatning qiymat nazariyasiga asoslanganligida bo‘lib, u mehnat taqsimotining yutuqlarini milliy bozorda ham, balki xalqaro miqyosda ham isbotlab bergan. Tashqi savdo jarayonlarini tushuntirib berishda mutlaq afzallik nazariyasi qamrab olmagan jihatlar ham mavjud bo’lib, u muammoli jihatlar D.Rikardoning nisbiy afzallik nazariyasi doirasida hal qilingan. Ya’ni D.Rikardo mutlaq afzallik nazariyasini takomillashtirib, nisbiy afzallik nazariyasini o‘rtaga tashlagan. Nisbiy afzallik nazariyasiga binoan ikki mamlakat o‘rtasidagi o‘zaro savdo, ulardan hech biri muayyan tovarni ishlab chiqarish borasida mutlaq afzallikka ega bo‘lmasa ham, manfaatli bo‘lishini bayon qilib bergan. Mazkur nazariya haqida A.Vaxabov “Nisbiy afzallik-agar mamlakat boshqa mamlakatga nisbatan kam xarajatlar bilan ishlab chiqarish mumkin bo‘lgan tovarlarni ishlab chiqarishga ixtisoslashsa, o‘zaro savdo ikkala mamlakat uchun ham foydali bo‘ladi. Bunda ishlab chiqarish bo‘yicha mutlaq afzallik bo‘lishi shart emas” deb nazariyaning tub mohiyatni ochib bergan. Nisbiy afzallik nazariyasiga ko‘ra, muayyan mamlakat boshqa mamlakat bilan taqqoslaganda nisbatan kam xarajat bilan ishlab chiqara oladigan tovarni ishlab chiqarishga ixtisoslashsa ularning birida ishlab chiqarish boshqasiga nisbatan mutlaq samarali boʻlmasada oʻzaro savdo har ikki mamlakat uchun nafli boʻladi. Albatta, nisbiy afzallik nazariyasi mavhum va juda soddalashtirilgan xususiyatga ega va tashqi savdoga bevosita taʼsir koʻrsatadigan bir qator omillarni eʼtiborga olmagan. Tashqi savdo mavzusiga oid nazariyalardan yana biri Xeksher-Ohlinning ishlab chiqarish omillari nisbati nazariyasi hisoblanadi. Unga koʻra, omil sigʻimligi maʼlum bir tovarni yaratish uchun ishlab chiqarish omillari nisbiy sarfini, omil serobligi esa mamlakatning ishlab chiqarish omillari bilan ta'minlanganlik darajasini ko'rsatadi. Turli mamlakatlarda tovarlar nisbiy narxidagi farq, oʻz navbatida ular oʻrtasidagi savdo bu davlatlarning ishlab chiqarish omillari bilan bir xil darajada ta'minlanmaganligini ko'rsatadi. Tashqi savdoga oid nazariyalardan yana biri, bu xalqaro savdoning standart modeli boʻlib, u xalqaro savdoda umumiy muvozanat modeli hisoblanadi va mamlakatda tovar talabi bilan taklifini shu tovarga xorijiy talab bilan taklifni oʻzaro bogʻlaydi.

Ushbu ta'limotga binoan har xil tovarlarning eksportiga xoxish bo'lishi uchun mamlakat importi zaruriy bo'lgan tovarlar miqdorini ifodalovchi talab vaziyatiga asoslangan. Shu bois bu model tashqi savdoning barcha asosiy parametrlari bilan bogʻliq boʻlgan milliy iqtisodiyotning ko'rsatkichlarini tadqiq qilish imkoniyatini beradi. Zero, tashqi savdoda ishtirok etuvchi har qanday mamlakat uchun eksport va import shartlarining har qanday ko'rinishdagi oʻzgarishlari real daromadning oʻzgarishini bildiradi. Shu bois tovar narxi oshganda, u eksport qilinayotgan boʻlsa, mamlakatning real daromadi ortadi, agar, bu tovar import qilinayotgan boʻlsa, aksincha, real milliy daromad kamayadi. Muayyan tovarning eksport va import narxlari nisbati yoki eksport va import narxlari indekslari eksport va import tovarlarining tashqi savdo shartlarini bildiradi. Shu bois mamlakatning savdo shartlari yaxshilansa, uning eksport daromadlari ortadi, aksi boʻlsa, kamayish tendensiyasi kuzatiladi.

Globallashuv sharoitida muayyan mamlakatda taklif yoki talabning oʻzgarishi uning savdo shartlariga to'g'ridan-to'g'ri ta'sir koʻrsatadi. Xalqaro hamjamiyatda tashqi savdo jarayoni mamlakatlarning ishlab chiqarish omillari bilan ta'minlanishi nuqtayi-nazaridan ham turli mutaxassislar tomonidan keng tadqiq qilingan. Bu tadqiqotlarga binoan xalqaro miqyosda ishlab chiqarish omillari narxlaridagi nisbiy farqlar u mamlakatlarning mazkur ishlab chiqarish omillari bilan notekis ta'minlanganligi uchun kelib chiqqan, degan xulosa qilingan. Shuning uchun mazkur nazariya borasida mutlaq va nisbiy afzallik nazariyalari singari qator gipotezalarga tayanilgan. Shundan kelib chiqqan holda bu nazariya "ishlab chiqarish omillari nisbati" yoki tadqiqotchilar nomiga tayanib "Xeksher-Ohlin" nazariyasi deb talqin qilingan.

Demak, Xeksher-Ohlin nazariyasiga ko'ra har bir mamlakat ishlab chiqarish faoliyatini oʻzida nisbatan koʻp bo'lgan ishlab chiqarish omilini intensiv talab qiluvchi tovarlarni ishlab chiqarishga ixtisoslashtirishi va u tovarlarni eksport qilib, aksinchalarini import qilish orqali resurslardan samarali foydalanishga va jahonda farovonlikni oshirishga erishish mumkin. Jahonda tashqi savdoni erkin amalga oshirish natijasida ayirbosh qilinayotgan tovarlarning nisbiy narxlari bir-biriga yaqinlashadi. Tovarlarning nisbiy narxi mamlakatlarning ishlab chiqarish omillari bilan ta’minlanganlik holatiga bogʻliq bo’ladi va ishlab chiqarish omillari narxiga ta’sir koʻrsatadi. Bu vaziyat P.Samuelson tomonidan tadqiq qilingan va u Xeksher-Ohlin teoremasidan kelib chiqib ishlab chiqarish omillari bahosining xalqaro miqyosda muvozanatga kelishini isbotlab bergan. Shu bois u Xeksher-Ohlin-Samuelson teoremasi sifatida talqin qilingan. Shu bois erkin tashqi savdo olib boruvchi mamlakatlarda turdosh (gomogen) ishlab chiqarish omillarining mutlaq va nisbiy narxlari muvozanatga kelishi qonuniyatligi isbotlangan. Shundan kelib chiqqan holda tovarning omil sigʻimliligi muayyan tovarni tayyorlash uchun ishlab chiqarish omillari nisbiy sarfi ustunligini, omillar serobligi esa mamlakatning mazkur ishlab chiqarish omili bilan nisbatan ustun ta’minlanganligini bildiradi. Demak, Xeksher-Ohlinning ishlab chiqarish omillari nisbati nazariyasiga koʻra, turli mamlakatlarda tovarlar nisbiy narxidagi farq va ular oʻrtasidagi savdo bu mamlakatlarning ishlab chiqarish omillari bilan bir xil nisbatda ta’minlanmaganligi tufayli kelib chiqayotganligini bildiradi.

Xalqaro savdo ilmi nuqtayi-nazaridan Xeksher-Ohlinning nazariyasi oʻzining ayrim nuqsonlari va mavhum jihatlari bilan bir qatorda bugungi kunda mamlakatlardagi tashqi savdoning rivojlanish xususiyatlarini ochib berishda ahamiyatiga ega bo’lmoqda. Shuning uchun bu ta’limot turli mamlakatlar va ularning tashqi savdosidagi tovarlar tarkibining omil sigʻimligi borasida bir necha marotaba empirik usulda tadqiq qilingan. Xususan, bu borada amalga oshirilgan yirik tadqiqotlardan biri bu Chikago universitetining professori va nobel mukofoti lauriyati V.Leontevning AQSh eksporti va importi asosida amalga oshirgan izlanish hisoblanadi. Aslida Xeksher-Ohlin nazariyasi V.Leontev tomonidan “input-output” jadvali ishlab chiqilgunga qadar amalda sinab koʻrilmagan. Chunki ungacha tovarlarning omil sigʻimliligini belgilaydigan mezonlar mavjud boʻlmagan. Bu vaziyat V.Leontev tomonidan “input-output” jadvali ishlab chiqilgandan soʻng yechimini topgan va birinchi marta V.Leontevning oʻzi Xeksher-Ohlin nazariyasini AQShning tashqi savdosi misolida empirik test asosida tekshirib koʻrgan.

Xeksher-Ohlin nazariyasiga binoan ikkinchi jahon urushidan keyin AQSh sarmoya serob mamlakatlardan biri boʻlib, boshqa mamlakatlarga nisbatan ish haqi toʻlash darajasi yuqori, sarmoyaning foiz stavkasi past bo’lganligi uchun sarmoya sigʻimli tovarlarni eksport, aksini import qilishi asosiy mantiqiy xulosa hisoblangan. Shu bois, V.Leontev tadqiqotida Xeksher-Ohlin nazariyasiga muvofiq, eksport tovarlari import oʻrnini bosuvchi tovarlarga nisbatan har bir ishchi kuchi hisobiga nisbatan koʻproq sarmoya talab qilishini kutgan. Ammo, tadqiqot natijasida buning ziddi kelib chiqqan va AQSh importining sarmoya talablilik darajasi eksport tovarlarga qaraganda 30 foiz darajasida yuqori chiqqan. Ya’ni, tadqiqot natijasida AQSh sarmoyaga boy mamlakat sifatida emas, balki, mehnat serob mamlakat sifatida namoyon bo’lgan. Mazkur, natija Xeksher-Ohlin nazariyasi o’rtaga tashlagan xulosaga nisbatan to’liq teskari yoki paradoks boʻlgan va shu bois bu tadqiqot Leontev paradoksi nomini olgan. Leontev paradoksi — bu Xeksher-Ohlin nazariyasining umumiy xususiyatga egaligini yuzaga chiqargan va asosan iqtisodiyoti taraqqiy etgan davlatlar bilan rivojlanayotgan mamlakatlar o‘rtasidagi savdo jarayonlarini ochib berishga yo’nalgan. Mazkur yo‘nalishdagi tadqiqotlar Yaponiya, Hindiston, Misr va Turkiya mamlakatlarining eksport va importlari misolida o’rganilgan bo’lib, ulardan kelib chiqqan natijalar Xeksher-Ohlin ta’limotida o’rtaga tashlangan g’oyalarni isbotlagan.

Foydalanilgan va tavsiya etiladigan adabiyotlar ro‘yxati

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EFFECTIVE STRATEGIES FOR TEACHING QUESTION FORMATION IN ENGLISH

Abstract:*Questions are the vital parts of communication. Actually, each of us uses the questions everyday to ask our needs or just information. However, the act of asking a question includes a surprising level of difficulty in English language. This article will provide educators with practical and effective strategies for teaching the various question types to English language learners by focusing on both grammatical accuracy and communicative fluency.*

Key words: *questions, grammar, fluency and learners.*

Introduction:

Before explaining specific types of questions, it is suggested to establish a clear understanding of sentence structures including with word orders. Teachers are supposed to explain that questions in English typically include adding the subject and auxiliary verb (or modal verb). This will help students to vivid understanding of question structure. Educators may use visual aids, like: presentations, to demonstrate this process clearly.

After explaining the sentence structure, educators are supposed to categorize different types of question by providing a structured approach to teaching. Interestingly, while categorizing the question types, teachers might give examples for each and make students form sentences by themselves.

Here are some examples for this:

- Yes/No Questions: This type of question are usually answered with a simple "yes" or "no." This type of the question typically begins with an auxiliary verbs like: (do, does, did, am, is, are, was, were, have, has, had, will, would, can, could, should, may, might, must). Educators give

example:

"Do you like my lessons?"

- Wh-Questions: This question type finds specific data and starts with a wh-word (who, what, where, when, why, how, which). For example:

"Where do you study?"

- Alternative Questions: This type of the question suggests two or more options as possible answers. Teachers may give an example: "Would you like listening or writing?"

- Tag Questions: This type of the question includes short questions added to the end of a statement to confirm or provide agreement. Example: "It's an interesting lesson, isn't it?"

Conclusion:

In short, asking questions is important to communication, the question types of English grammar sometimes present challenges for learners. This article has offered practical and effective methods to assist educators teach different question types effectively by improving both grammatical accuracy and communicative fluency.

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GEOGRAFIYA FANI O‘QUV JARAYONIDA O‘QUVCHILARNING FANGA QIZIQISHINI RAQAMLI XARITALAR ORQALI OSHIRISH

Annotatsiya: *Geografiyani xaritasiz tasavvur qilib bo‘lmaydi. Bu bog’liqlikni mustahkamlash, o‘quvchilarni zamonaviy sohalar (GAT) bilan tanishtirib, fanga qiziqishini oshirib borish ta’lim sifatini yaxshilaydi. Ushbu maqolada mental va raqamli xaritalardan Geografiya darslarida foydalanish bo‘yicha ayrim namunalar keltirib o‘tilgan.*

Kalit so‘zlar: *Geografiya, o‘quv jarayoni, mental xaritalar, raqamli xaritalar, GAT (geografik axborot tizimlari), GPS navigator, masshtab, integratsiya.*

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INCREASING STUDENTS' INTEREST IN SCIENCE THROUGH DIGITAL MAPS IN GEOGRAPHY LEARNING PROCESS

Abstract: *Geography cannot be imagined without a map. Strengthening this relationship, introducing students to modern fields (GIS) and increasing their interest in science will improve the quality of education. This article presents some examples of the use of mental and digital maps in Geography lessons.*

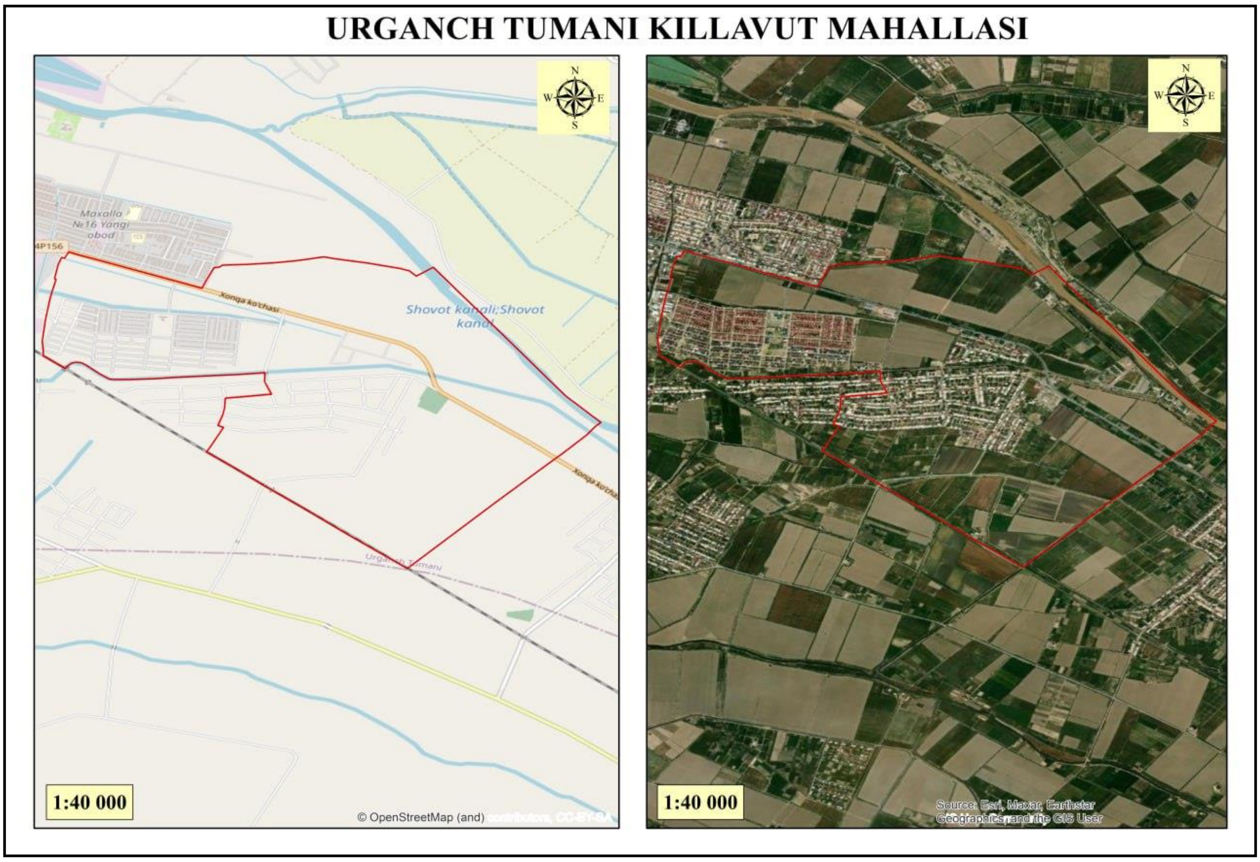
Key words: *Geography, educational process, mental maps, digital maps, GIS (geographic information systems), GPS navigator, scale, integration.*

O‘quv jarayonida ham boshqa faoliyatlar singari makon va zamonda o‘zgarish xususiyati mavjud. So‘nggi yillarga kelib mamlakatimizdagi ta’lim-tarbiya tizimining sifat va samaradorligini oshirish, o‘quvchi-yoshlarda zamonaviy bilim hamda ko‘nikmalarni shakllantirish, ta’lim tizimiga zamon yutuqlarini keng joriy qilish, turli sohalar o‘rtasida yaqin hamkorlikni yo‘lga qo‘yish choralari asta-sekin ko‘rilmoqda. Ya’ni mamlakatimizning, aytaylik, viloyatimizning turli hududlaridagi o‘quv jarayonlari yoki bundan 20-30 yil oldingi ta’lim tizimi bilan bugungi o‘quv faoliyatlari bir-biridan sezilarli darajada farqlanadi. Bunga o‘sha hudud yoki davrning ijtimoiy-iqtisodiy muhiti – o‘quvchi va o‘qituvchilarning o‘zaro munosabatlari, dunyoqarashi, fanning o‘quv resurslari bilan, o‘quv xonalarining ta’lim vositalari bilan ta’minlanganlik darajalari va boshqa omillar ta’sir ko‘rsatadi. Rivojlanayotgan zamonda boshqa sohalar singari Geografiya ta’limini ham samarali tashkil etish davr talabi bo‘lib, tabiiy, ijtimoiy va iqtisodiy qonuniyatlarning umumiy tavsifini bilish, hududiy jihatdan tahlil qila olish har bir mustaqil fikrli shaxs uchun muhim jihatlardan biridir. Buning uchun soha mutaxassislari ilm-fan yutuqlari va mavjud imkoniyatlaridan to‘laqonli foydalanishga harakat qilishi, fanning yashirin qirralarini ochib bera olishi zarur.

Informatika deganda, xayolga birinchi navbatda kompyuter va axborot kelsa, Geografiya deganda globus va xaritalar keladi. N.N.Baranskiy ta’biri bilan aytganda esa xarita – geografiyaning “ikkinchi tili” bo‘lishi bilan birga, geografik tadqiqotlarning boshlanishi va oxiri hamdir. Shuning uchun ham har bir dars mashg‘ulotida ular bilan bog’lanish bor, darslarni “hamkorlikda” olib borish talab qilinadi. Garchi, kompyuter texnologiyalari rivojlanib borayotgan, qog‘oz xaritalardan ko‘ra elektron xaritalar qulaylik tug‘dirayotgan zamonga o‘tib borayotgan bo‘lsak-da, respublikamiz maktablari to‘liq bir xilda jihozlangan emas va bu juda qiyin ish. Ta’lim muassasalarining aksariyatida ta’lim vositalarining an’anaviyligi, ya’ni texnik bazaning yetishmovchiligi o‘quvchilarning ta’lim olishiga to‘siq bo‘lmasligi kerak. Zero, birinchi prezidentimiz I.A.Karimovning O‘zR Oliy Majlisining Birinchi chaqiriq 14-sessiyasidagi ma’ruzasida “Zamonaviy pedagogik va axborot texnologiyalarini o‘z vaqtida ishlab chiqish va joriy etishni ta’minlashni alohida nazorat ostiga olish zarur” [1] deya, bergan ko‘rsatmasini unutmaslik lozim.

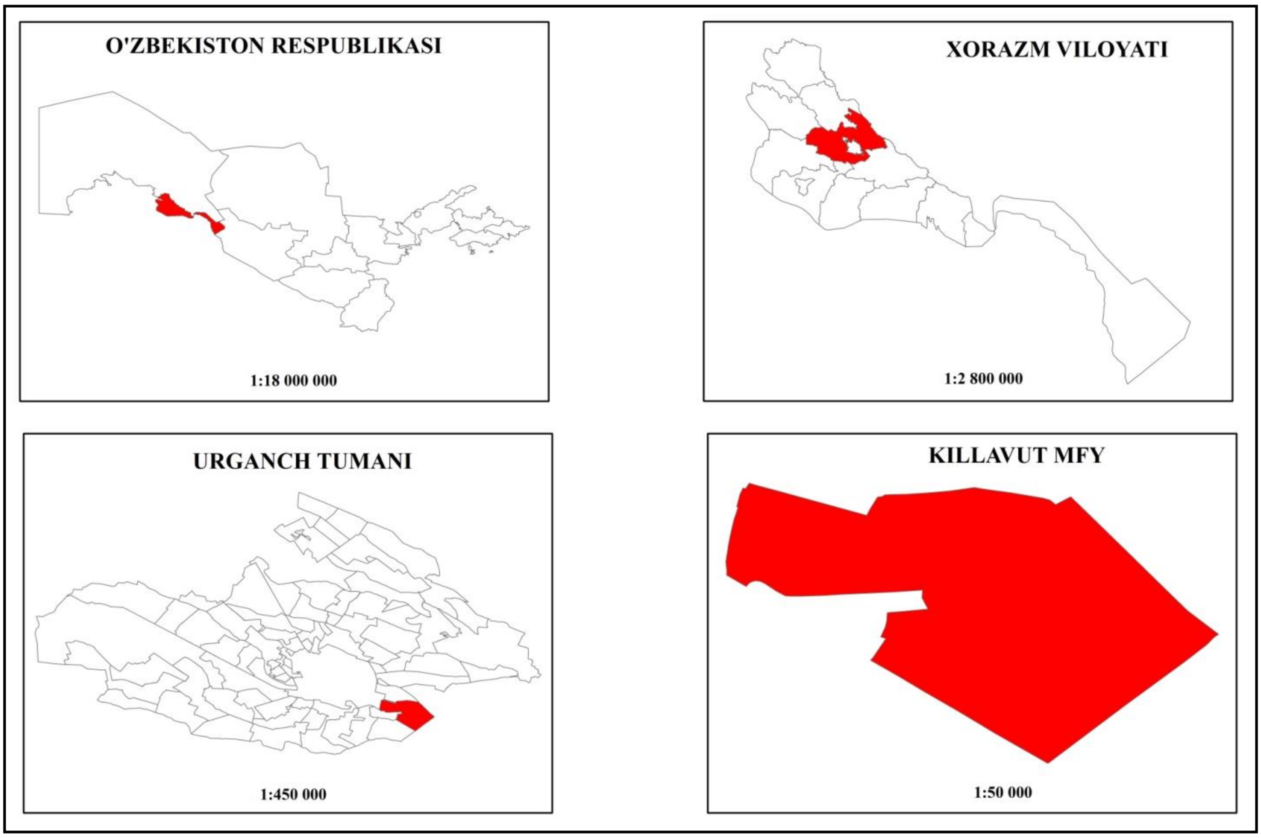
Bugunga kelib zamonaviy geografiya ta’limiga an’anaviy ta’limda ham qo‘llash mumkin bo‘lgan yana bir yangi tushuncha – mental xaritalar tushunchasi kirib keldi va u tobora ommalashmoqda. Bunda Geografiyani o‘rganishning asosiy “shart”laridan biri – nazariy bilimlarga tayanib, tasavvurni ishga solish talab qilinadi. Albatta, bu o‘qituvchining pedagogik mahorati va o‘quvchining dunyoqarashi bilan chambarchas bog‘liq jarayon. Chunki o‘rganilayotgan hududning xaritasini o‘quvchilar o‘z tasavvurida shakllantira olishlari uchun avval shu hudud haqida nazariy bilimga ega bo‘lishi kerak.

Umuman, mental xaritalar vositasida, o‘quvchilar darslikdagi matnlarni o‘qiganida, fanga doir turli illustrativ materiallarni tomosha qilganlarida yoki biron-bir materikning hududini internet saytlarida izlayotgan paytida ushbu hududning “obraz”ini xayolan o‘zida shakllantirishi zarur [4]. Boshqa tomondan axborot-texnologiyalarining ommalashayotgan davridamiz. Bu esa mavjud imkoniyatdan unumli foydalanish, o‘quvchi-yoshlarga fan-texnika yutuqlarini ko‘rsata bilish kerakligini taqozo etadi. Bu borada biz sun’iy yo‘ldosh ma’lumotlari va ularning afzallik, imkoniyatlaridan ham Geografiya darslari o‘quv jarayoni davomida foydalana olishimiz, mavzudan uzoqlashmagan holda ma’lumot berib o‘tishimiz, o‘quvchilarni GAT (geografik axborot tizimlari; GIS)dagi faoliyatlar, yutuqlar va yana bir yangi tushuncha “raqamli xaritalar” bilan tanishtirishimiz mumkin. Bu o‘quvchida zamonaviy sohalar haqida tasavvur uyg‘otish bilan birga, ma’lumotlarni yaxshi o‘zlashtirib olish imkoniyatini beradi. Masalan, har qanday o‘quvchi uchun aytaylik, xarita haqidagi ma’lumotlarni shunchaki eshitib o‘tirishdan ko‘ra, eshitish bilan birga, kompyuterda mavjud ma’lumotlarni qo‘shib, bir xarita yarata olishi u uchun maroqli va samaraliroq natija beradi. To‘g‘ri, bu jarayonning maktab o‘quv jarayonida qo‘llanila boshlanishi ko‘p vaqt va mablag‘ talab qiladi. Ammo, bu kabi nazariy bilimlarning amaliy faoliyat bilan integratsiyasi yuqori natijalarga olib keladi.



1-rasm. “Geografik xaritalar” mavzusini tushuntirishda GAT ma’lumotlari orqali o‘z yashash hududi tasvirini ko‘rsatish (Killavut mahallasi misolida)

Shu o‘rinda amerikalik psixolog olimlardan R.Karnikau va F.Makelroularning o‘rganishlarini aytish mumkin. Ularning tadqiqotlariga ko‘ra, shaxsning tabiiy fiziologik-psixologik imkoniyatlari unga muayyan shakllarda o‘zlashtirilgan bilimlarni turli darajada saqlab qolish imkonini berar ekan. Ya’ni shaxs agar manbani o‘zi o‘qisa, 10 %; ma’lumotni eshitganida – 20 %; sodir bo‘lgan voqea, hodisa yoki jarayonni ko‘rganida – 30 %; sodir bo‘lgan voqea, hodisa yoki jarayonni ko‘rib, ular to‘g‘risida ma’lumotlarni eshitganida – 50 %; ma’lumot (axborot)larni o‘zi uzatganida (so‘zlaganida, bilimlarini namoyish etganida) – 80 %; o‘zlashtirilgan bilim (ma’lumot, axborot)larni o‘z faoliyatiga tatbiq etganida – 90 % hajmdagi ma’lumotlarni yodda saqlash imkoniyatiga ega bo‘lar ekan [3]. Shuning uchun ham darslarning ko‘rgazmaliligini oshirish, turli maket, modellardan, o‘quvchi diqqatini jalb qiluvchi geografik ma’lumotlardan o‘rinli foydalana bilish lozim. Misol uchun 7-sinf Geografiya darsligidagi “Geografik xaritalar” mavzusini tushuntirishda raqamli xarita ma’lumotlari asqotadi. Namuna sifatida aytadigan bo‘lsak, ta’lim muassasasi joylashgan mahallani mobil ilovalardagi raqamli xaritalar (GPS navigator) ma’lumotlari orqali bo‘rttirib ko‘rsatilishi o‘quvchi uchun qiziqarli (1-rasm). Yoki shu darslikdagi “Masshtab” mavzusini yanada soddaroq tushuntirishda ham bu usul qo‘l keladi (2-rasm).



2-rasm. “Masshtab” mavzusi uchun GATdan foydalanish bo‘yicha namuna

7-sinf o‘quvchisi “Masshtab” mavzusidagi masshtabning o‘zgarishi va ahamiyatini GAT ma’lumotlari asosida tuzilgan illustrativ material yordamida yanada yaxshiroq tushunish bilan birga, ko‘rsatilgan hudud (o‘z yashash yoki o‘qish joyi)ning geografik joylashuvi, katta-kichikligi, shakli haqidagi dastlabki ma’lumot va tasavvurlarga ham ega bo‘ladi. Bu esa o‘quvchida mental xaritalarning ahamiyatini oshiradi.

Xulosa sifatida aytish mumkinki, yuqoridagi 1-2-rasm ma’lumotlari Xorazm viloyati Urganch tumanida joylashgan Killavut mahallasi misolida bo‘lib, pedagog ularni dars o‘tadigan sinfi, mavzusi va mavzudan ko‘zlangan maqsadiga ko‘ra o‘zgartirishi, shunga o‘xshash o‘quvchilar uchun noodatiy xaritalardan foydalanishi mumkin. Bu kabi sodda raqamli xaritalarni geografiya yo‘nalishi mutaxassislari o‘zlari mustaqil tayyorlash ko‘nikmasini shakllantirsa bo‘ladi yoki GAT mutaxassislari bilan hamkorlikda ishlash orqali yarata oladilar. Bu turdosh sohalararo integratsiya yoshlar o‘rtasida dunyoqarashni kengaytirish va fanga qiziqishni kuchaytirish bilan birga, Geografiya fani mavqeining oshishida ham xizmat qiladi. Bu esa, samarali ta’lim degani. Zero, o‘rganilayotgan bilimga hurmat va qiziqish bor joyda, oson va samarali o‘rganish shakllana oladi.

Foydalanilgan adabiyotlar ro‘yxati:

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THE ROLE OF CORPORATE CULTURE IN IMPROVING THE LABOR POTENTIAL OF EMPLOYEES

Abstract:*Corporate culture is a critical factor in organizational success and failure, influencing value creation, innovation, and ethics. This literature review synthesizes research on the nature, significance, and mechanisms of corporate culture, drawing on examples of successes, like Google, and failures, such as Volkswagen and Wells Fargo. The review explores how leadership, governance, and compensation systems shape cultural effectiveness and highlights best practices for fostering productive, aligned cultures. Recommendations are provided to help organizations assess and improve their culture, offering a framework to drive long-term success.*

Keywords: *Corporate culture, organizational success, leadership and governance, cultural alignment, best practices, business ethics*

Introduction

Corporate culture is a vital determinant of organizational success, shaping employee motivation, engagement, and overall performance. Defined as the shared values, norms, and practices guiding behavior within organizations, it plays a crucial role in fostering innovation, collaboration, and ethical conduct. Studies emphasize that a strong corporate culture aligns employee goals with organizational objectives, driving productivity and long-term growth (Graham et al., 2023; Kulapov et al., 2019; Putilova & Shutaleva, 2020).

Interviews with executives reveal that corporate culture is among the top three drivers of firm value, directly influencing labor potential and organizational outcomes. Companies like Google exemplify how an innovation-driven culture promotes adaptability and market leadership, while failures at Volkswagen and Wells Fargo demonstrate the consequences of cultural misalignment and ethical lapses (Graham et al., 2023; Danko et al., 2018).

Effective corporate cultures not only enhance employee satisfaction but also build organizational resilience, ensuring ethical accountability and sustained success. This paper explores the mechanisms by which corporate culture improves labor potential, drawing insights from case studies and best practices to provide actionable recommendations for fostering productive, aligned cultural frameworks.

Literature review

Corporate culture plays a pivotal role in shaping the success, sustainability, and effectiveness of organizations by influencing employee behavior, motivation, and overall organizational performance. It encompasses the shared values, norms, beliefs, and behaviors that define how individuals interact and work within an organization. Defined as “the distinctive norms, beliefs, principles, and behaviors that unite to give each organization its unique character” (Kulapov et al., 2019) corporate culture creates a framework for decision-making, fostering motivation, engagement, and performance.

A positive corporate culture, characterized by shared values and norms, directly impacts employee satisfaction, commitment, and productivity, ultimately leading to enhanced organizational outcomes (Ahmad, 2020; Ghumiem et al., 2023; Shrestha, 2024). Research highlights that organizations with robust cultures not only attract and retain talent but also cultivate a workforce that is innovative, collaborative, and aligned with strategic goals (Michulek et al., 2023; Fatmawati, 2023; Syahnur, 2023; Melnyk & Davydenko, 2020). A strong corporate culture also promotes resilience and optimism by integrating psychological capital, which mediates the relationship between culture and employee performance (Luo et al., 2017; Az-Zaakiyyah, 2024).

Leadership plays a critical role in nurturing and sustaining a supportive corporate culture. Effective leaders promote open communication, trust, and alignment with organizational values, significantly enhancing employee engagement and innovation (Kulapov et al., 2019; Michulek et al., 2023; Fatmawati, 2023). Furthermore, investments in cultural development, such as team-building initiatives and transparent communication, are recognized as essential tools for driving long-term success and adaptability in volatile economic environments (Putilova & Shutaleva, 2020; Danko et al., 2018).

Thus, cultivating a strong corporate culture is integral to leveraging human resources effectively, enhancing organizational resilience, and achieving strategic objectives. Whether through fostering employee commitment, promoting innovation, or ensuring alignment with strategic goals, corporate culture serves as both an intangible asset and a critical driver of sustainable success.

Methodology

This study employs a literature review approach to analyze the impact of corporate culture on employee labor potential and organizational performance. The methodology involves the following steps:

Literature Selection

The review incorporates 56 peer-reviewed journal articles, books, and conference proceedings published between 2020 and 2024, focusing on the relationship between corporate culture, employee performance, and organizational outcomes. Key databases such as Scopus, PubMed, and Google Scholar were searched using keywords like “corporate culture,” “employee performance,” “leadership,” “organizational success,” and “psychological capital.”

Data Collection and Analysis

Relevant studies were collected, and their key findings were synthesized to identify trends, gaps, and best practices. Emphasis was placed on quantitative data linking corporate culture to performance metrics and qualitative insights into leadership, governance, and psychological capital.

Validation

Cross-referencing with multiple studies ensured the accuracy and reliability of the findings. Recommendations were aligned with evidence-based insights to ensure practical applicability.

By employing this structured methodology, the study aims to provide a comprehensive understanding of corporate culture's role in enhancing organizational performance and to formulate actionable recommendations for practitioners.

Findings

The findings from the literature review underscore the critical role of corporate culture in driving employee performance and organizational success, as summarized in **Table 1**. These findings were formulated through a comprehensive analysis of existing research, drawing on case studies, surveys, and expert interviews as presented in the reviewed literature. The process involved synthesizing diverse perspectives on the impact of corporate culture, with particular focus on its influence on innovation, ethical practices, employee engagement, and strategic alignment.

Table 1. Summary of key corporate culture themes and their importance

Theme	Key Findings	Sources
Corporate culture as a value driver	- Enhances employee satisfaction, productivity, and customer loyalty. - Aligns employee behaviors with organizational goals. - Drives innovation and long-term success.	Kulapov et al., 2019; Danko et al., 2018 ; Putilova & Shutaleva, 2020 ; Ghumiem et al., 2023 ; Michulek et al., 2023.
Role of leadership	- Leadership is critical in cultivating and sustaining corporate culture. - Leaders shape trust, alignment, and innovation. - Open communication fosters collaboration and engagement.	Danko et al., 2018 ; Kulapov et al., 2019; Fatmawati, 2023 ; Michulek et al., 2023 ; Luo et al., 2017 .
Psychological capital	- Resilience, optimism, and adaptability enhance employee engagement and performance. - Promotes team cohesion, mutual respect, and organizational stability.	Putilova & Shutaleva, 2020 ; Luo et al., 2017 ; Ahmad, 2020 ; Az-Zaakiyyah, 2024 .
Cultural fit and organizational development	- Misaligned cultures hinder M&A success and employee retention. - Adaptability in culture is essential in volatile environments.	Danko et al., 2018 ; Kulapov et al., 2019; Ghumiem et al., 2023 .
Impact on innovation	- Corporate culture fosters innovation through fairness, transparency, and teamwork.	Danko et al., 2018 ; Kulapov et al., 2019; Putilova & Shutaleva, 2020 ; Shrestha, 2024 .

	- Enhances innovative activity and long-term competitiveness.	
Employee satisfaction and retention	- Fairness, mutual respect, and recognition increase employee satisfaction and loyalty. - Reduces turnover and improves retention.	Kulapov et al., 2019; Putilova & Shutaleva, 2020 ; Ahmad, 2020 .
Best practices for culture development	- Investments in corporate culture lead to long-term success. - Best practices include team-building events, transparent communication, and prioritizing employee security and development.	Danko et al., 2018 ; Putilova & Shutaleva, 2020 ; Ghumiem et al., 2023 ; Michulek et al., 2023 .

Table 2 synthesizes insights from **Graham et al. (2023)** and provides an overview of how corporate culture influenced successes and failures in organizations like Google, Volkswagen, and Wells Fargo. These cases underscore the critical role of cultural alignment, transparency, and ethical accountability in achieving sustainable organizational success.

Table 2. Corporate Culture Case Studies – Insights Based on Reviewed Evidence

Organization	Cultural Characteristics	Impact on Success or Failure	Lessons Learned
Google	- Open, innovation-driven culture. - Emphasis on collaboration, adaptability, and integrity. - Strong leadership in cultural alignment.	- Continuous innovation and adaptability. - High employee satisfaction and retention. - Long-term success and market leadership.	- A culture promoting openness and creativity fosters innovation and employee engagement.
Volkswagen	- Results-driven culture prioritizing performance over ethical behavior. - Lack of transparency and ethical accountability.	- Emissions scandal resulted in reputational damage. - Financial losses and decreased consumer trust. - Employee morale affected negatively.	- Prioritizing ethics and transparency is essential to avoid systemic failures and uphold trust.
Wells Fargo	- High-pressure sales culture. - Incentive structures misaligned with ethical principles.	- Scandal involving unethical practices (fake accounts). - Legal penalties, loss of customer	- Aligning incentive structures with cultural and ethical values is critical to

trust, and employee turnover.	maintain integrity and trust.

Source: ***Graham, J. R., Harvey, C. R., Popadak, J., & Rajgopal, S.*** *(2023). Corporate culture: The interview evidence. Journal of Applied Corporate Finance, 35(1), 1–20.*

Recommendations

To foster a strong and ethical corporate culture, organizations should ensure that leadership actively models cultural values, emphasizing ethical decision-making alongside performance. Leaders should be trained to promote inclusivity, transparency, and collaboration, while creating an environment that empowers employees to innovate and contribute meaningfully. Recognizing and rewarding behavior aligned with organizational values, fostering open communication, and designing ethical incentive systems are essential for maintaining cultural alignment.

Organizations must integrate ethics into their foundation through comprehensive training, a clear code of conduct, and transparency in compliance efforts. Regular cultural assessments, such as audits and employee surveys, should be conducted to identify misalignments and make necessary adjustments. Supporting employee well-being, investing in team-building, and building psychological capital, such as resilience and adaptability, are also critical for sustaining an engaged workforce. By continuously aligning cultural practices with strategic goals and addressing evolving needs, organizations can maximize employee potential and achieve long-term success.

Concusion

Corporate culture is a critical driver of organizational success, shaping employee performance, innovation, and long-term resilience. Across the reviewed literature and case studies, it is evident that a well-defined and aligned corporate culture enhances employee engagement, fosters innovation, and builds a foundation for ethical and sustainable practices. Organizations such as Google exemplify the benefits of an innovation-driven culture that prioritizes transparency, inclusivity, and adaptability, leading to continuous growth and competitive advantage. Conversely, the failures at Volkswagen and Wells Fargo demonstrate the risks of cultural misalignment, where the emphasis on short-term performance or sales targets undermined ethical practices and trust, resulting in significant reputational and financial damage.

Leadership plays a pivotal role in defining and sustaining corporate culture. Effective leaders act as stewards of cultural values, embedding them into governance structures, incentive systems, and everyday organizational practices. The alignment between leadership behaviors and cultural goals ensures that employees remain motivated and aligned with strategic objectives. Moreover, the integration of psychological capital—resilience, optimism, and adaptability—further strengthens the cultural fabric, enabling organizations to navigate challenges and maintain performance in dynamic environments.

The findings also highlight the importance of balancing innovation and performance with ethical accountability. Organizations with strong cultures not only achieve higher productivity but also mitigate risks associated with unethical behavior. Best practices, such as fostering transparency, ensuring alignment of incentives with cultural values, and investing in employee well-being, emerge as critical components of successful corporate cultures.

In conclusion, corporate culture serves as both an enabler and a determinant of organizational success. To optimize labor potential and sustain growth, organizations must prioritize the cultivation of a positive and adaptive culture. This requires ongoing efforts to align cultural values with strategic goals, empower employees, and ensure ethical practices are deeply embedded in the organizational framework. By doing so, organizations can build resilience, enhance innovation, and achieve long-term success in an increasingly complex and competitive business environment.

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SIRDARYO VILOYATI ATMOSFERA RADIATSIYASI O'ZGARISHINING GAT TAHLILI

Annotatsiya: *Ushbu maqolada atmosfera radiatsiyasining ta'rifi, mohiyati, keltirib chiqaruvchi omillar hamda sabablar keltirilgan. Shuningdek, atmosfera radiatsiyasining mahalliy ko'lamda o'rganish metodikasi hamda Sirdaryo viloyatining 2000-2023 yillardagi radiatsiya balansining o'zgarish holati va tahlili aks ettirilgan.*

Kalit so'zlar: *atmosfera radiatsiyasi, elektromagnit energiya, quyosh doimiysi, Sirdaryo viloyati yillar kesimida radiatsiya balansi, yalpi radiatsiya*

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GAT-ANALYSIS OF CHANGES IN ATMOSPHERIC RADIATION IN SYRDARYA REGION

Abstract: *This article presents the definition, essence, causes and reasons of atmospheric radiation. It also reflects the methodology for studying atmospheric radiation on a local scale, the state of change and analysis of the radiation balance of Syrdarya region in 2000-2023.*

Keywords: *atmospheric radiation, electromagnetic energy, solar constant, radiation balance of Syrdarya region by years, gross radiation.*

Kirish. Atmosfera nurlanishi (atmosfera radiatsiyasi) - atmosferaning turli qatlamlarida joylashgan zarrachalarning qizishi natijasida yuzaga keladigan infraqizil to'lqin uzunligi diapazonidagi atmosferaning o'ziga xos nurlanishi. Atmosfera radiatsiyasi Yerning radiatsiya balansini va issiqxona effektini tashkil qiladi [1].

Quyosh nurlagan elektromagnit energiyasi quyosh radiatsiyasi yoki nurli energiya deb ataladi. Yer sirtiga yetib kelgan quyosh radiatsiyasining asosiy qismi issiqlikka aylanadi. Sayyoramiz uchun quyosh radiatsiyasi yagona energiya manbaidir.

Harorati mutlaq noldan yuqori boʻlgan barcha jismlar oʻzidan radiatsiya nurlaydi. Meteorologiyada nurlanayotgan jismning harorati va nurlanish qobiliyati bilan belgilanadigan haroratga bogʻliq radiatsiya koʻriladi.

Jismning nurlanish qobiliyati deb birlik vaqt davomida birlik yuzadan (S=1 m^2) barcha yoʻnalishlarda nurlanayotgan energiya miqdori tushuniladi. Bu kattalik nurli oqim yoki radiatsiya oqimi deb ham ataladi. SI tizimida uning oʻlchov birligi J/m^2*s yoki Vt/m^2.[2]

Quyosh doimiysi – bu Yerdan Quyoshgacha boʻlgan oʻrtacha masofada, atmosferaning yuqori chegarasida quyosh nurlariga perpendikulyar birlik yuzaga birlik vaqt davomida kelgan quyosh radiatsiyasi miqdoridir. Yer usti oʻlchovlari, sun’iy yoʻldoshlar va kosmik kemalardan olingan kuzatishlar natijasida hozirgi paytda quyosh doimiysining son qiymati 1,367 ±0,007 kVt/m^2 teng ekanligi aniqlangan [2].

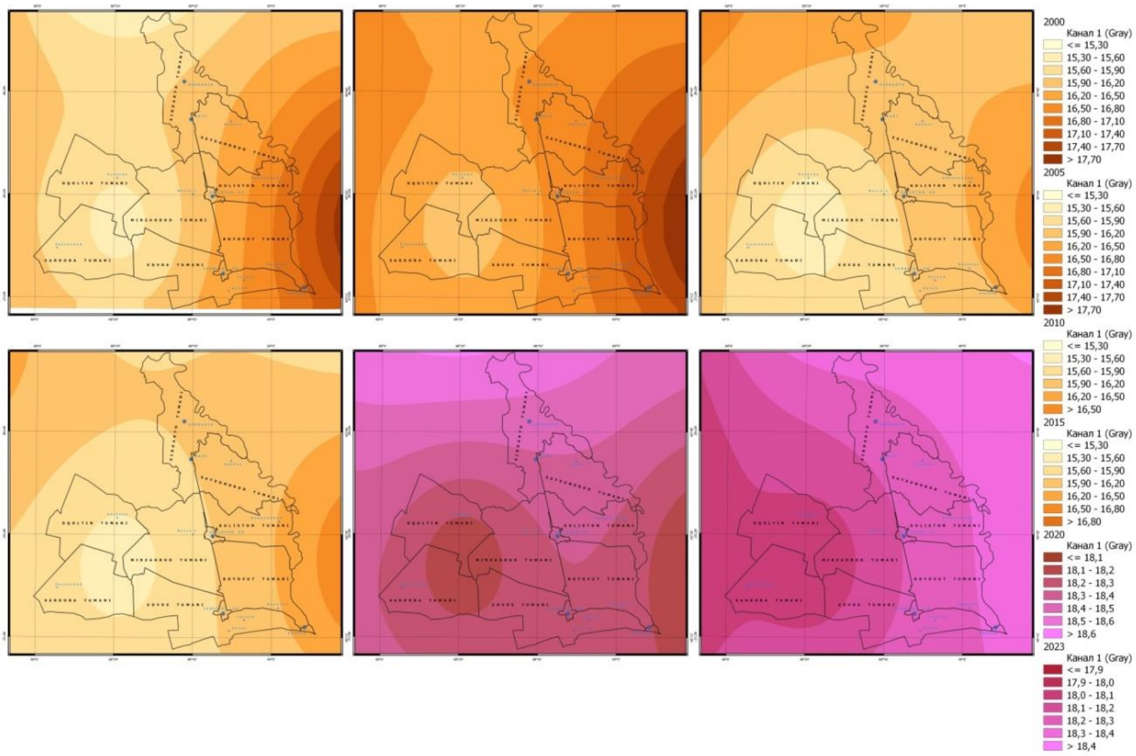
Yer orbitasi choʻzilgan ellips boʻlganligi uchun, yil mobaynida quyosh doimiysining son iymati ±3,5% ga oʻzgaradi. Quyosh doimiysining qiymatiga quyosh faolligi va boshqa astronomik omillar ta’sir qiladi. Bir yilda yer sirtining har 1 km^2 maydoniga oʻrtacha 4,27·1016 J issiqlik yetib keladi [2].

Quyosh radiatsiyasining atmosferada yutilishi 15-20 % ga teng. Eng koʻp miqdorda ozon, karbonat angidrid gazlari yutadi. Aksincha, kislorod, azot va suv bugʻlari quyosh radiatsiyasining ayrim nurlarini qisman yoki kam yutadi. Quyosh radiatsiyasining eng faol boʻlgan vaqti asosan atmosferaning xiralashishi (ayniqsa shaharlarda) va bulutsiz kunlarda. Quyosh radiatsiyasini qaytarishi va sochilishiga atmosferadagi qattiq va suyuq moddalar asosiy omil hisoblanadi [3].

Metodologiyasi. Sirdaryo viloyati atmosferasiga tushadigan quyosh radiatsiyasi ma’lumotlarini Sirdaryo gidrometeorologiya boshqarmasi hamda Global Solar Atlas (https://globalsolaratlas.info/) va https://power.larc.nasa.gov/ xalqaro iqlim rasmiy saytlaridan olindi. Quyosh radiatsiyasining atmosferada yutulishi yuqorida ta’kidlanganidek bir nech omillar tufayli oʻzgarib turadi. Viloyatda radiatsiya balansi yillik oʻrtacha 5580 MJ/m^2 dan 6580 MJ/m^2 gacha oʻzgaradi. Yer sharining 40-44° shimoliy kengliklarida 5100 MJ/m^2 dan 6300 MJ/m^2 gacha farq qiladi [5] .

Yillar kesimida radiatsiya 2000, 2005, 2010, 2015 va 2020-yillar olindi. Birlik sifatida yillik oʻrtachani chiqarish maqsadida MJ/m^2∗kun olindi (1-rasm)

Asosiy qism. Viloyat hududida 2000 yilda quyosh radiatsiyasi sharqdan gʻarbga submeridional yoʻnalishda 17,4 MJ/m^2*kun dan 15,3 MJ/m^2*kun gacha oʻzgargan. Oqoltin tumanining janubi-sharqi, Sardoba tumanining shimoli-sharqi va Mirzaobod tumanning janubi-gʻarbi hamda Sirdaryo tumanining shimoli-gʻarbiy qismlarida radiatsiya miqdori 15,3 MJ/m^2*kun gachani tashkil qiladi. Oqoltin va Sardoba tumanlarining qolgan qismlari, Mirzaobod, Xovos va Sirdaryo tumanlarining gʻarbiy qismida kunlik radiatsiya miqdori 15,3-15,6 MJ/m^2 ni tashkil qiladi. Sirdaryo, Mirzaobod tumanlarining qolgan qismlariga hamda va Xovos tumanining 68° 40` va 68° 45` gʻ.uz.lar oraligʻi, Guliston shahrining gʻarbiy qismi, Sayxunobod va Guliston tumanlarining shimoli-g‘arbiy qismlarida radiatsiya miqdori kuniga har m^2 ga 15,6-15,9 MJ ni tashkil qilgan. Xovos va Sayxunobod tumanlarining markaziy qismi, Yangiyer shahri, Boyovut tumani va Guliston tumanlarining g‘arbiy qismi, Sirdaryo tumanining janubi-sharqiy bo‘lagida radiatsiya miqdori kuniga har m^2 ga 15,9-16,2 MJ ni tashkil qilgan. Boyovut, Guliston, Sayxunobod va Xovos tumanlarining 68° 54` va 69° 05` shq.uz oralig‘ida radiatsiya miqdori kuniga har m^2 ga 16,2-16,5 MJ ni tashkil qilgan. Xovos, Boyovut, Guliston tumanlarining sharqiy qismi, Sayxunonod tumanining janubi-sharqiy qismi hamda Shirin shahrida radiatsiya miqdori kuniga har m^2 ga 16,5-16,8 MJ ni tashkil qilgan. Guliston, Boyovut va Xovos tumanlarining janubi-sharqiy chekka qismlarida radiatsiya miqdori kuniga har m^2 ga 15,6-15,9 MJ ni tashkil qilgan.



1-rasm. Sirdaryo viloyati 2000-2023 yillarda atmosfera radiatsiyasining o‘zgarish kartasi.

Viloyat hududida 2005 yilda radiatsiya miqdori nisbatan ortdi. Hududning katta qismida radiatsiya miqdori 15,6-16,5 MJ/m^2*kun ni tashkil etgan. 15,6-15,9 MJ/m^2*kun li izoliniya asosan Oqoltin tumanining janubi-sharqi, Sardoba tumanining shimoli-sharqi va Mirzaobod tumanining janubi-g‘arbiy qismida hosil bo‘lgan. Sardoba va Oqoltin tumanlarining qolgan asosiy qismlari, Xovos, Mirzaobod va Sirdaryo tumanlarining 68°42' shq uz.ning g‘arbiy qismlarida 15,9-16,2 MJ/m^2*kun li izoliniya o‘tgan. Sirdaryo va Mirzaobod tumanlarining sharqiy qismlari, Guliston va Yangiyer shaharlari, Sayxunobod, Guliston va Boyovut tumanlarining g‘arbiy qismlari, Xovos tumanining markaziy qismida yalpi radiatsiya miqdori har m^2 ga 16,2-16,5 MJ/ kun ni hosil qilgan. Sayxunobod va Xovos tumanlarining sharqiy qismlari, Guliston va Boyovut tumanlarining markaziy qismlariga quyosh radiatsiya har m^2 16,5-16,8 MJ/kun ni tashkil qilgan. 16,8-17,1 MJ/m^2*kun li yalpi raditsiya izoliniya esa Shirin shahri, Guliston va Boyovut tumanlarining sharqiy qismlari hamda Sayxunobod va Xovos tumanlarining sharqiy chekka qismlarida hosil boʻlgan. Faqatgina Guliston tumanining sharqiy eng chekka qismida yalpi radiatsiya miqdori 17,1-17,4 MJ/m^2*kun ni tashkil qilgan.

2010-yilda Oqoltin tumanining janubi-sharqi, Mirzaobod tumanining janubi-gʻarbi, Sardoba tumanining shimoli-sharqi va Xovos tumanining shimoli-gʻarbiy qismi yalpi radiatsiya miqdori har m^2 15,3 MJ/kun ni tashkil etadi. Sardoba tumanining qolgan qismi, Oqoltin tumanining gʻarbiy va shimoliy qismi, Mirzaobod va Xovos tumanlarining gʻarbiy va markaziy qismi, Sirdaryo tumanining gʻarbiy va shimoliy qismlarida yalpi radiatsiya miqdori har m^2 15,3-15,6 MJ/kun li izoliniyani hosil qilgan. Sirdaryo tumanining shimoli-gʻarbiy qismidan boshqa barcha qismlari, Guliston va Yangiyer shaharlari, Shirin sharining gʻarbiy qismi, Mirzaobod tumanining sharqiy qismi, Xovos tumanining sharqiy yarmi, Boyovut, Guliston, Sayhunobod tumanlarining Sirdaryo sohilidan boshqa barcha qismlarida quyoshning yalp radiatsiyasi kunlik 15,6-15,9 MJ/m^2 lik energiya hosil qilgan. Sirdaryo boʻyi, Sirdaryo tumanining shimoli-gʻarbiy qismlarida quyoshning yalp radiatsiyasi kunlik 15,9-16,2 MJ/m^2 lik energiya hosil boʻlgan.

2015-yilda Oqoltin tumanining janubi-sharqi, Mirzaobod tumanining janubi-gʻarbi, Sardoba tumanining shimoliy va sharqiy hamda Xovos tumanining shimoli-gʻarbiy qismi yalpi radiatsiya miqdori kunlik har 15,3 MJ/m^2 ni tashkil etadi. Sardoba, Oqoltin va Mirzaobod tumanlarining qolgan qismi, Guliston shahrining gʻarbiy qismi, Xovos tumanining gʻarbiy katta qismi, Sirdaryo tumanining janubi-gʻarbiy va shimoliy qismlarida yalpi radiatsiya miqdori har m^2 15,3-15,6 MJ/kun li izoliniyani hosil qilgan. Sayhunobod tumani, Sirdaryo tumanining sharqiy va markaziy qismlari, Guliston shahrining sharqiy qismi, Yangiyer shahri, Boyovut, Guliston tumanlarining katta qismi (69°02' shq.uz.gacha), Xovos tumanining sharqiy yarmi(69°05 shq.uz.gacha)ga quyoshning yalpi radiatsiyasi kunlik 15,6-15,9 MJ/m^2 lik energiya hosil qilgan. Guliston va Boyovut tumanlarining sharqiy Sirdaryo boʻyi sohillari, Xovos tumanining sharqiy chekka qismi, Shirin shahrida quyoshning yalp radiatsiyasi kunlik 15,9-16,2 MJ/m^2 lik energiya hosil qilgan.

2020-yilda viloyat hududida quyosh yalpi radiatsiya miqdori keskin oshan (3MJ/m^2*kun) va asosan geografik kenglik boʻyicha 18,1 MJ/m^2 dan 18,5MJ/m^2gacha oʻzgargan. Oqoltin tumanining janubi-sharqi, Mirzaobod tumanining janubi-gʻarbi, Sardoba tumanining shimoliy va sharqiy hamda Xovos tumanining shimoli-gʻarbiy qismi yalpi radiatsiya miqdori kunlik har 18,1 MJ/m^2 ni tashkil etadi. Oqoltin tumanining shimoliy va gʻarbiy qismi, Sardoba tumanining janubi-gʻarbiy yarmi, Mirzaobod tumanining shimoliy, markaziy va janubi-sharqi, Xovos va Boyovut tumanlari, Yangiyer va Shirin hamda Guliston tumanining janubi-sharqi va sharqiy qismi, Sayxunobod tumanining janubi-sharqiy chekka qismida quyoshning yalpi radiatsiya miqdori 18,2 MJ/m^2 li izoliniyani hosil qilgan. Boyovut tumnining shimoli-gʻarbi, Mirzaobod tumanining shimoli-sharqi, Guliston shahri, Guliston tumanining markaziy, shimoliy va gʻarbiy qismi, Sayhunobod tumanining sharqiy, markaziy, g‘arbiy va janubiy qismlari, Sirdaryo tumanining janubi hamda Oqoltin tumanining shimoli-g‘arbiy qismida radiatsiya miqdori 18,3 MJ/m^2ni hosil qilgan. Sayxunobod va Sirdaryo tumanlarining 40°45`sh.k.dan Sirdaryo tumanining 40°55`sh.k.gacha bo‘lgan hududida 18,4 MJ/m^2 li izoliniyali quyosh yalpi radiatsiyasi o‘zgargan. Sirdaryo tumanining 40°55`sh.k.dan shimol tomon quyoshning yalpi radiatsiya miqdori 18,5 MJ/m^2 gacha o‘zgargan.

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IQLIM O'ZGARISHINING GEOGRAFIK XUSUSIYATLARI

Annotatsiya: *Ushbu maqolada issiqxona gazlari, ularning tarkibi, kelib chiqish sabablari va ularning o'zgarishi, atmosfera hamda yer tabiatiga ta'siri ifodalangan. Shuningdek, issiqxona gazlari natijasida iqlim o'zgarishi (global iqlim isishi va gloabl iqlim namlanishi)ning geografik jihatlari hamda ularni tadqiq qilgan olimlar ishlari tahlil qilib yozilgan*

Kalit so'zlar: *issiqxona gazlari (CO_2, CH_4), Mauna Loa, Iqlim o'zgarishi bo'yicha Xalqaro Panel (IPCC), WMO, Copernicus, A.Gutterish, global iqlim namlanishi, global qaynash.*

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GEOGRAPHICAL CHARACTERISTICS OF CLIMATE CHANGE

Abstract: *This article describes greenhouse gases, their composition, the causes of their origin and their changes, as well as their impact on the atmosphere and nature of the Earth. It also analyzes the geographical aspects of climate change caused by greenhouse gases (global warming and global humidification) and the work of scientists who studied them.*

Keywords: *greenhouse gases (CO2, CH_4), Mauna Loa, International Panel on Climate Change (IPCC), WMO, Copernicus, A. Hatterisch, global warming, global warming.*

Kirish. Issiqxona gazlari asosan karbonat angidrid (CO_2) va metan (CH_4) gazlaridan iborat. CO_2 troposferada to'planadigan asosiy issiqxona gazidir va taxminan 400 yil yashash muddatiga ega. Gavayidagi Mauna Loa tepasida real vaqt rejimida CO_2 miqdorini o'lchash 1959-yildagi 315 ppm ($1\cdot10^{-6}$) dan 2007-yilda 383 ppm gacha ko'tarilganini ko'rsatadi. Aksincha, Antarktika muz yadrolari CO_2 emissiyasi so'nggi 400 ming yil ichida 200 dan 280 ppm gacha bo'lganini ko'rsatadi [1]. Metan karbonat angidridga qaraganda issiqxona gazining kichikroq tarkibiy qismi bo'lsa-da, lekin karbonat angidriddan 20 marta issiqxonani isitish effektiga ega. Metan o‘lchovlari hozirda 1700 ppb(10^{-9}) dan oshadi, muz yadrosi o‘lchovlari esa metan taxminan 400 dan 700 ppb gacha bo‘lganligini ko‘rsatadi [2].

Iqlim o‘zgarishi bo‘yicha Xalqaro Panel o‘zining to‘rtinchi hisobotida, global isish inson faoliyati natijasida 1950 yildan beri haroratning ko‘tarilishiga sabab bo‘lgan asosiy omil degan xulosaga keldi [3]. Elektr energiyasi ishlab chiqarish (ko‘mir) va transport uchun (benzin va dizel yoqilg‘isi) har yili 27 mlrd tonnadan ortiq CO_2 yoqilg‘i yonishi natijasida atmosferaga chiqariladi. Bu esa CO_2 ning havo ifloslantiruvchi boshqa moddalar, jumladan $PM_{2,5}$ va ozon (O_3) bilan bir xil hajmga ega [4].

Tadqiqotning o‘rganilishi. 1827-yilda fransuz fizigi Jan-Batist Jozef Furye issiqxona effekti nazariyasini taklif qildi. U atmosferadagi suv bug‘lari, karbonat angidrid, metan va ozon quyoshdan keladigan issiqlikni ushlab turishini “issiqxona gazlari” deb atagan.

1859 yilda ingliz fizigi Jon Tyndall laboratoriya tajribalaridan foydalanib, issiqxona effektining mavjudligini tasdiqladi va atmosferadagi gazlar kontsentratsiyasining o‘zgarishi iqlimni o‘zgartirishi mumkin degan fikrni ilgari surdi.

1896 yilda shved olimi, Nobel mukofoti sovrindori Svante August Arrhenius atmosferada CO_2 ning to‘planishi o‘rtacha haroratning oshishini aniqladi. Agar u ikki baravar oshsa, Yer yuzasidagi o‘rtacha harorat 5 °C ga ko‘tarilishini hisoblab chiqdi. Bundan tashqari, Arrhenius atmosferadagi CO_2 konsentratsiyasining pasayishi muzlik davri asosiy omillardan ekanligini aniqladi.

Biroq, bu nazariyalarning barchasi ham ilmiy hamjamiyat tomonidan qo‘llab-quvvatlanmadi. O‘sha davr olimlarining aksariyati iqlim o‘zgarishi juda sekin sodir bo‘ladi va insonlar unga ta’sir qila olmaydi degan fikrlarini ilgari surishgan.

1938 yilda ingliz meteorologi Guy Styuart Kallendar XIX-asr o‘rtalaridan beri 147 ta ob-havo stansiyasi ma’lumotlarini tahlil qilib, so‘nggi 50 yil ichida global harorat 0,3 °C ga oshganini aniqladi. U iqlim isishining asosiy sabablaridan biri sifatida inson faolligini, xususan, issiqxona effektini keltirib chiqaradigan gazlar atmosferaga chiqarilishining ortishini isbotladi.

1950 yilda Amerikalik fizik Gilbert Plassning isish va inson faoliyati o‘rtasidagi bog‘liqlik haqidagi bir qator maqolalari nashr etilgandan so‘ng, ko‘plab olimlar iqlim o‘zgarishi muammosiga qiziqish bildirdi.

1958 yilda amerikalik meteorolog Charlz Killing atmosferadagi CO_2 miqdorini Gavayidagi Mauna Loa rasadxonasida o‘lchashni boshladi. Uning tajribalari davomida CO_2 ning kontsentratsiyasi yillik haroratning o‘rtacha o‘sish bilan bir vaqtda ortib borayotganini isbotladi. Ushbu ma’lumotlar hozirgi iqlim o‘zgarishiga antropogen ta’sirning hissa qo‘shganining birinchi ilmiy tasdig‘i bo‘ldi. Rasadxona tomonidan to‘plangan o‘lchovlar atmosferadagi CO_2 o‘rtacha kontsentratsiyasining 1958 yildagi 0,0315 % dan 2015 yilda 0,0403 % gacha barqaror o‘sishini ko‘rsatadi. Biroq, olimlar ushbu natijani bu mavsumiy o‘zgarishlar tufayli deb taxmin qilishdi va Killingning topilmalari ko‘p e’tiborni jalb qilmadi.

1960-yillarda Iqlim oʻzgarishi muammosining mavjudligi va unga inson taʼsiri ehtimoli AQShning bir qancha ilmiy tashkilotlari tomonidan tan olingan (Milliy fan jamgʻarmasi (1963), AQSh Prezidentining ilmiy maslahatchilar qoʻmitasi (1965) va Milliy Fanlar akademiyasi (1966)). 1967 yilda “issiqxona effekti” ni hisoblashning birinchi ilmiy modeli yaratildi. Shu bilan birga, global isish istiqbollari haqida birinchi ilmiy prognozlar paydo boʻldi. 1968 yilda birinchi marta Antarktika muzlari erishi va halokatli oqibatlarga olib kelishi mumkinligi taxmin qilingan. 1970-yillarda Ekologik harakat faol rivojlana boshladi. Tabiatni muhofaza qilish tashkilotlari Shimoliy Amerika va Gʻarbiy Yevropada ularning bosimi ostida jamoatchilik fikrini shakllantirishga jiddiy taʼsir koʻrsata boshladilar. Hukumat ekologiya muammolariga, jumladan, iqlim oʻzgarishi muammosiga koʻproq eʼtibor bera boshladi.

1972 yilda Stokgolmda atrof-muhit muhofazasi boʻyicha xalqaro konferensiya boʻlib oʻtdi. Unda atrof-muhit muammosi, shu jumladan, iqlim oʻzgarishi birinchi marta global °Cda muhokama oʻtkazildi. Shu bilan birga, atrof-muhitni muhofaza qilish sohasidagi birinchi hujjat qabul qilindi.

1975 yilda Science jurnalida amerikalik olim Uollas Broker birinchi marta “global isish” atamasi ishlatilgan maqola chop etildi [5]. Bu atama asta-sekin “iqlim oʻzgarishi” iborasini almashtirib, ilmiy muomalaga kirdi. U 1988 yil iyul oyida NASA iqlimshunos olimi Jeyms Xansenning AQSh Senatida eʼlon qilingan nutqidan soʻng ilmiy atama sifatida keng tarqala boshladi.

1988 yilda “Iqlim oʻzgarishi boʻyicha Xalqaro Panel” (IPCC; Jahon Meteorologiya Tashkiloti va Birlashgan Millatlar Tashkilotining Atrof-muhit boʻyicha dasturi bilan birgalikda tashkil etilgan) xalqaro °Cda isish muammosini muhokama qilish va iqlim boʻyicha ilmiy, texnik va ijtimoiy-iqtisodiy maʼlumotlarni baholash uchun tuzildi. 1990 yilda bu tashkilot atrof-muhitning holati toʻgʻrisidagi birinchi hisobotni eʼlon qildi. Unda atmosferaga issiqxona gazlarining chiqarilishi yer yuzasining ortiqcha isishiga olib keladi. Agar sayyoramizda hozirgi isish surʼatlari davom etsa, kelgusi yarim asr ichida insoniyatga hech qachon maʼlum boʻlmagan harorat kuzatilishi mumkin.

1989 yilda Buyuk Britaniya Bosh vaziri Margaret Tetcher BMTda soʻzlagan nutqida “...biz atmosferaga juda koʻp miqdorda CO_2 chiqarilishining guvohi boʻlayapmiz, natijada kelajakda bizni kutayotgan oʻzgarishlar ancha fundamental boʻladi va biz ilgari tasavvur qilganimizdan ham kengroq xususiyatga ega” boʻlishini taʼkidlagan.

1990-yillarning boshlariga kelib Ilmiy hamjamiyat (AQSHning Milliy Fanlar Akademiyasi va London Qirollik Jamiyati asosidagi), odatda, Yerdagi global isish atmosferadagi “issiqxona” gazlari, birinchi navbatda, karbonat angidrid, shuningdek metan, suv bugʻlari, azot oksidi, freonlar va boshqalar konsentratsiyasining oshishi bilan bogʻliq degan fikrni shakllantirdi.

Ushbu nazariya muxoliflarining eʼtirozlari, iqlim isish davrlari Yer tarixida bir necha bor sodir boʻlganligi bilan izohlanadi. Bundan tashqari, soʻnggi 30 yil ichida baʼzi hududlarda global issiqlik, boshqalarida esa global sovuqlik kuzatildi. Baʼzi olimlarning fikriga koʻra, sayyoramizning asosiy ekologik muammosi o‘rmonlar maydonining qisqarishi va iqlim o‘zgarishiga ko‘proq issiqxona gazlari emas, balki global namlik va issiqlik uzatish mexanizmining buzilishi sabab bo‘lishi mumkinligini ta’kidladilar. Geografik nazariyalar iqlimning uzoq muddatli o‘zgarishini yer qobig‘ining harakati, materiklar va okeanlarning joylashuvi o‘zgarishi bilan izohlaydi. 2014 yilda issiqxona gazlari emissiyasi rekord °Cga yetdi. Karbonat angidrid miqdori 2013 yildagi 396 ppm dan 398 ppm ga ko‘tarildi 2015 yil yanvar-sentyabr oylarida, Buyuk Britaniya Met-ofis ma’lumotlariga ko‘ra, Yerdagi o‘rtacha harorat 1850 yildan 1900 yilgacha bo‘lgan yillik o‘rtacha ko‘rsatkichdan 1,02°C ga oshgan edi [6].

Ekspertlar hamjamiyatining fikricha, o‘rtacha global haroratning sanoatdan oldingi davrda 2°C ga oshishi odamlar va ekotizimlar uchun qaytarilmas oqibatlarga olib kelishini ta’kidlagan Olimlarning tadqiqotlariga ko‘ra yaqin kelajakda **global iqlim namlanishi** prognoz qilingan. XXI asrda dengiz sathining ko‘tarilishi 1 m gacha bo‘lishi mumkin (XX asrda - 0,1-0,2 m). O‘simlik va hayvon turlarining 30-40 % gacha yo‘qolishi haqida bashoratlar mavjud. Chunki ularning yashash joylari bu o‘zgarishlarga moslasha olganidan tezroq o‘zgaradi. O‘rmonlarning tur tarkibi ham o‘zgaradi va muzliklarning intensiv erishi boshlanadi. Muzning erishi tufayli okeanlarda sho‘rlik darajasining pasayishi, Golfstrim oqimining o‘zgarishiga olib keladi. Bundan tashqari, kuchli shamol va issiqlik to‘lqinlari, sunami va toshqinlar kabi tabiat hodisalarning chastotasi va kuchi ortadi. Shunday qilib, global isish butun insoniyat uchun jiddiy salbiy oqibatlarga olib keladigan o‘zgarishlarni keltirib chiqaradi va iqlim o‘zgarishini tezlashtiradi. [7]

2021-yil 27 may kuni Jahon meteorologiya tashkiloti (JMT) Buyuk Britaniyaning meteobyurosi tomonidan tayyorlangan Global iqlim bo‘yicha byulletenga tayanib, kelgusi 5 yil ichida (2021-2025 yillarda) kamida bir yil tarixdagi eng issiq yil bo‘lishining 90 % ehtimoli borligi va 2016 yilni birinchi rekord darajadagi issiq yil bo‘lishi mumkinligi haqida xabar qilingan press-reliz nashr etdi.

Taxmin qilinmoqdaki, o‘rtacha yillik global harorat har bir kelgusi besh yilliklarda sanoatgacha bo‘lgan darajadan 0,9-1,8°C ga yuqori bo‘lishi mumkin.

Darhaqiqat, iqlim o‘zgarishi sohasida xalqaro ekspertlarning so‘nggi baholashlari shuni ko‘rsatadiki, iqlim o‘zgarishiga uzoq muddatli tendensiya tobora kuchayib bormoqda.

Jahon meteorologiya tashkilotining «2020 yilda global iqlim holati» deb nomlangan ma’ruzasida 2011 yildan 2020 yilgacha bo‘lgan o‘n yillik va 2015 yildan 2020 yilgacha bo‘lgan olti yillik kuzatuv tarixida ushbu davrlarni eng issiq davrlar deb nomlandi.

2020 yil meteorologik kuzatuv tarixida sayyoramiz bo‘yicha o‘rtacha eng issiq uch yilliklardan biri bo‘ldi. Dunyo bo‘yicha o‘rtacha eng issiq yillar 2016 va 2019 yillarda kuzatilgan.

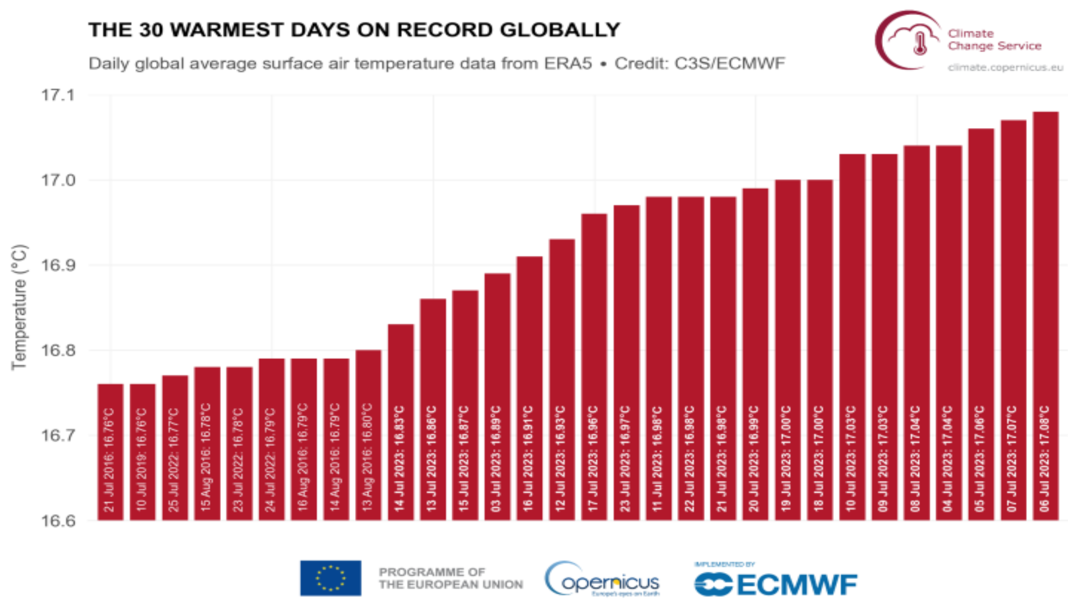
O‘zbekistonda 2020 yilda yer yuzasining boshqa mamlakatlari kabi harorat ko‘rsatkichlari bo‘yicha rekord darajada qayd etilmadi. Respublika hududining katta qismi hatto eng issiq yillarning o‘ntaligiga ham kirmadi. O‘rtacha yil uchun me’yorga nisbatan O‘zbekistonning eng issiq hududi shimoli-g‘arbiy hududlar –

Qoraqalpog‘iston Respublikasi bo‘ldi. Kuzatuvlarning tartiblangan qatorida (eng issiq yildan sovuqgacha) Qoraqalpog‘istonning Amudaryo deltasi 2020 yil Top-10, Ustyurt platosi Top-5 eng issiq yil, Orol dengizi esa 2020 yil butun kuzatuv qatori uchun eng issiq yil bo‘ldi.

Buyuk Britaniya Meteobyurosining baholashi hududiy darajada global baholashdan biroz farq qilishi ehtimoli katta, biroq bu uzoq muddatli isish tendensiyasini buzmaydi.

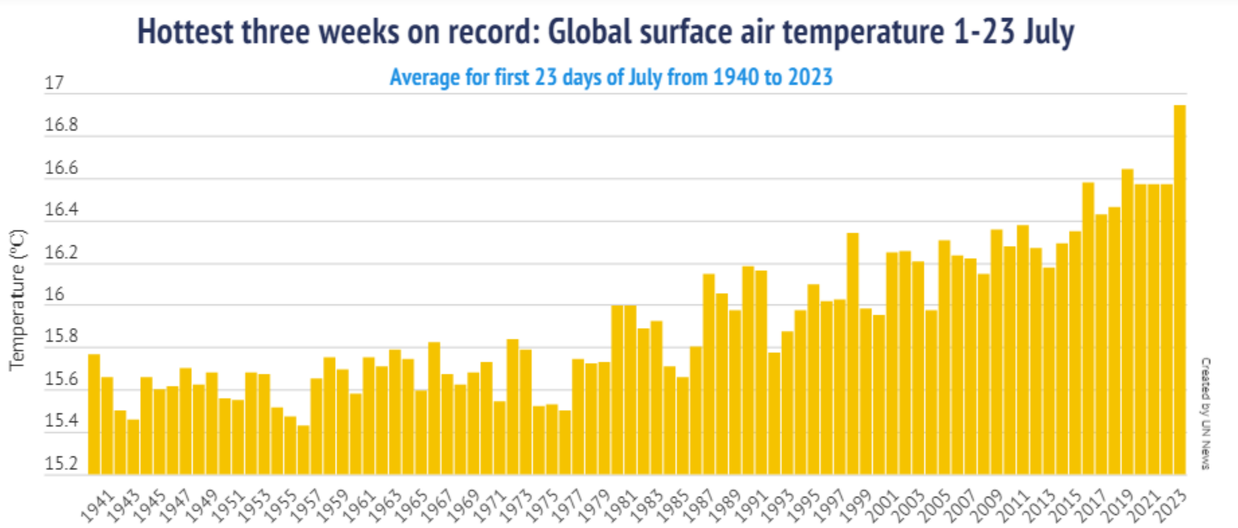
2023 yil 26-iyulida Yevropa Ittifoqi va Jahon Meteorologiya Tashkiloti ma’lumotlariga asoslanib BMTning Nyu-Yorkdagi shtab-kvartirasida qilgan chiqishida BMT bosh kotibi Antonio Gutterish 2023 yildan boshlab “Global isish davri tugadi, global qaynash davri kirib keldi” – deya ta’kidladi [8]. Meteorologik kuzatuvlar natijasida 2023 yilning iyuli kuzatuvlar tarixidagi eng issiq oy bo‘ldi. Bu oyda eng issiq uch hafta va eng issiq uch kun qayd etildi [1.2.1-rasmga qarang].

WMO(World Meteorological Organization - https://wmo.int/) va Copernicus (Yevropa Ittifoqining Yerni kuzatish komponenti kosmik dasturi - https://www.copernicus.eu/en/about-copernicus) ma’lumotlariga ko‘ra, iyulda eng issiq uch haftalik davr va rekord darajadagi eng issiq uch kun qayd etildi, ular - 5, 6 va 7-iyul (1-rasm).



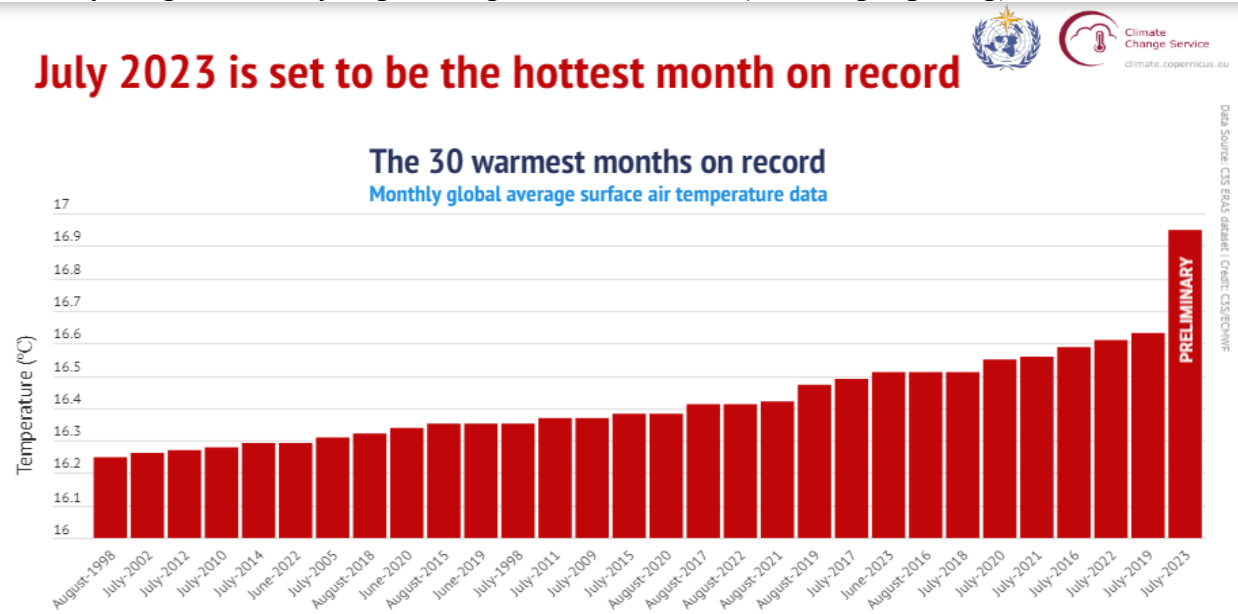
1 -rasm. https://wmo.int/news/media-centre/july-2023-set-be-hottest-month-record

Iyul oyining dastlabki 23 kunida sayyoradagi o‘rtacha harorat 16,95 ℃ ni tashkil qildi. Bu 2019-yil iyul oyida qayd etilgan 16,63℃ dan ancha yuqori bo‘lib, bugungi kunga qadar qayd etilgan eng issiq oy hisoblanadi (2-rasmga qarang).



1 -rasm. https://news.un.org/en/story/2023/07/1139162

Copernicus direktori Karlo Buontemponing ta’kidlashicha, 2023 yil iyul oyidagi harorat 1940-yillardan beri qayd etilgan ob-havo rekordlaridan keskin farq qiladi hamda “so‘nggi yuz ming yil ichida ham misli ko‘rilmagan rekord °Cni qayd etgan”. Bayonotda aytilishicha, bu haroratlar Shimoliy Amerika, Yevropa va Osiyodagi haddan tashqari issiqlik to‘lqinlariga, shuningdek, Kanada va Gretsiyadagi o‘rmon yong‘inlariga sabab bo‘ladi (3-rasmga qarang).



1.2.3-rasm. https://news.un.org/en/story/2023/07/1139162

“Rekord haroratlar global haroratning keskin o‘sishi tendensiyasining bir qismidir. Haroratning ko‘tarilishining asosiy sababi antropogen chiqindilar”, — deydi Copernicus iqlim o‘zgarishi tashkiloti direktori Karlo Buontempo .

Avvalroq, World Weather Attribution (WWA - Jahon ob-havo ma’lumoti) olimlar jamoasi ham iyul oyida Shimoliy Amerika, Yevropa va Osiyoni qamrab olgan haddan tashqari jaziramada antropogen iqlim o‘zgarishi asosiy rol o‘ynagan degan xulosaga kelgandi.

WWA olimlar jamoasining tadqiqotiga ko‘ra “Agar insonning iqlimga ta’siri bo‘lmaganida, dunyoda haroratning bunday ko‘tarilishi uchun sharoit juda kichik bo‘lar edi”. Issiqxona gazlari chiqindilari Yevropada havo haroratining 2,5 °C, Shimoliy Amerikada 2 °C, Xitoyda esa 1 °C ga ko‘tarilishiga olib keldi (WWA tahlili).

Iqlimning isishiga sabab bo‘lgan yana bir omil bu - Tinch okeanining sharqiy qismida haroratning g‘ayritabiiy o‘sishi bilan tavsiflangan El-Nino tabiat hodisasidir [9].

Yuqoridagi antropogen va tabiiy omillarning 98 foizlik ehtimollik bilan bir-biriga qo‘shilishi keyingi besh yillik tarixdagi eng issiq yil bo‘lishiga olib keladi.

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HARBIY RAHBARLIKDA ZAMONAVIY TEXNOLOGIYALARNING O'RNI VA AHAMIYATI

Annotatsiya: *Ushbu maqolada harbiy rahbarlikda zamonaviy texnologiyalarning roli va ahamiyati yoritiladi. Zamonaviy axborot texnologiyalari, suniy intellekt, dronlar, robotik tizimlar, simulyatsiya va virtual haqiqat kabi texnologiyalar harbiy operatsiyalarni rejalashtirish, boshqaruvni takomillashtirish va xalqaro xavfsizlikni ta'minlashda qanday muhim ahamiyatga ega ekani ko'rib chiqiladi. Shuningdek, kelajakda innovatsion texnologiyalarning harbiy rahbarlikka ta'siri va istiqbollari muhokama qilinadi. Texnologiyalarning samarali qo'llanilishi strategik qaror qabul qilishni yaxshilash, resurslarni tejash va xavfsizlikni oshirish uchun asosiy omil sifatida taqdim etiladi.*

Kalit so'zlar: *harbiy rahbarlik, zamonaviy texnologiyalar, suniy intellekt, dronlar, robotlar, simulyatsiya, virtual haqiqat, xalqaro xavfsizlik, strategiya va qarorlar.*

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THE ROLE AND IMPORTANCE OF MODERN TECHNOLOGIES IN MILITARY LEADERSHIP

Annotation: *This article will highlight the role and importance of modern technologies in military leadership. It examines how modern information technologies, artificial intelligence, drones, robotic systems, simulation, and virtual reality are playing a significant role in planning military operations, improving management, and ensuring international security. It also discusses the future impact and prospects of innovative technologies on military leadership. The effective use*

of technologies is presented as a key factor in improving strategic decision-making, saving resources, and increasing security.
Keywords: *military leadership, modern technologies, artificial intelligence, drones, robots, simulation, virtual reality, international security*

KIRISH

Zamonaviy texnologiyalar bugungi kunda harbiy rahbarlik sohasining ajralmas qismiga aylangan. Ular nafaqat harbiy operatsiyalarni samarali rejalashtirish va amalga oshirishda yordam beradi, balki qaror qabul qilish jarayonlarini ham ancha optimallashtiradi. Harbiy rahbarlik – bu tezkorlik va aniq ma’lumot talab qiladigan jarayon bo‘lib, texnologiyalar ushbu jarayonni muvofiqlashtirishda muhim vosita hisoblanadi. Masalan, axborot texnologiyalari yordamida real vaqt rejimida ma’lumotlarni yig‘ish, tahlil qilish va tarqatish imkoniyati yaratiladi, bu esa rahbarlarning to‘g‘ri qaror qabul qilishida hal qiluvchi rol o‘ynaydi.

Texnologiyalar yordamida strategiya va qarorlar qabul qilish sezilarli darajada o‘zgarib, zamonaviylashdi. Sun’iy intellekt tizimlari, katta hajmdagi ma’lumotlarni tahlil qilish (Big Data), va virtual modellashtirish vositalari orqali rahbarlar murakkab vaziyatlarni tezda tahlil qilish imkoniyatiga ega bo‘lmoqdalar. Masalan, suniy yo‘ldosh orqali uzatilgan tasvirlar va dronlar tomonidan taqdim etilgan ma’lumotlar bir necha daqiqada qayta ishlanib, strategik qarorlar uchun asos bo‘lishi mumkin. Shuningdek, texnologiyalar yordamida turli vaziyatlar uchun simulyatsiyalar va modellar yaratilib, harbiy rahbarlar oldindan muqobil strategiyalarni sinab ko‘rish imkoniyatiga ega bo‘ladi.

Umuman olganda, zamonaviy texnologiyalar harbiy rahbarlarning ishini nafaqat osonlashtiradi, balki ularning samaradorligini oshiradi. Ular orqali harbiy sohada tezkorlik, aniqlik va xavfsizlikni ta’minlashga erishiladi, bu esa har qanday operatsiyaning muvaffaqiyati uchun muhim omil hisoblanadi.

NATIJA VA MUHOKAMA

Zamonaviy **axborot texnologiyalari** harbiy boshqaruv tizimining asosiy ustunlaridan biri hisoblanadi. Harbiy rahbarlar strategik qarorlar qabul qilish, operatsiyalarni boshqarish va xavfsizlikni ta’minlash uchun texnologiyalarni keng qo‘llamoqda. Ayniqsa, **sun’iy intellekt** (SI) va katta hajmdagi ma’lumotlarni tahlil qilish tizimlari harbiy operatsiyalarning murakkab jihatlarini aniqlashda hal qiluvchi ahamiyat kasb etmoqda. Sun’iy intellekt yordamida murakkab axborot oqimlari avtomatik tahlil qilinib, natijalar rahbarlar uchun qulay formatda taqdim etiladi. Bu esa vaziyatlarni tezkor tahlil qilish, dushmanning ehtimoliy harakatlarini oldindan bashorat qilish va samarali qarorlar qabul qilish imkonini beradi.

Ma’lumotlarni tahlil qilish tizimlari harbiy boshqaruvda muhim vosita bo‘lib, katta hajmdagi ma’lumotlarni qayta ishlash orqali strategik ma’lumotlarni aniqlashni osonlashtiradi. Masalan, real vaqt rejimida yig‘ilgan ma’lumotlar dronlar, sun’iy yo‘ldoshlar va kiber kuzatuv vositalari orqali qayta ishlanadi. Bu tizimlar dushman harakatlarini kuzatish, geografik joylashuvni aniqlash va operatsion ma’lumotlarni yangilab turish imkonini beradi. Bunday texnologiyalar rahbarlarga qisqa vaqt ichida to‘g‘ri qaror qabul qilishga yordam beradi, bu esa harbiy operatsiyalar muvaffaqiyatini oshiradi.

Bundan tashqari, **axborot xavfsizligini ta’minlash** harbiy boshqaruvda asosiy vazifalardan biri hisoblanadi. Kiber hujumlar xavfi oshib borayotgan bugungi kunda, harbiy tizimlarning himoyasi alohida ahamiyat kasb etmoqda. Harbiy boshqaruv markazlari kuchli kiber himoya tizimlariga ega bo‘lib, dushmanlarning ma’lumotlar bazalariga kirishining oldini olish, tizimlarni buzishga qaratilgan urinishlarni aniqlash va ularni bartaraf etish uchun ishlatiladi. Shuningdek, **kiber hujumlarga qarshi kurash** vositalari orqali maxfiy ma’lumotlarning xavfsizligi ta’minlanadi, bu esa harbiy strategiyalarning sir tutilishi va muvaffaqiyatli amalga oshirilishini kafolatlaydi.

Umuman olganda, axborot texnologiyalari harbiy boshqaruvning samaradorligini oshiradi. Ular rahbarlarga murakkab axborotlarni boshqarish, kiber tahdidlarni bartaraf etish va sun’iy intellekt imkoniyatlaridan foydalanib operatsiyalarni tezkor boshqarish imkonini beradi. Shu sababli, axborot texnologiyalarini rivojlantirish harbiy sohadagi muvaffaqiyatning muhim omillaridan biridir.

Zamonaviy **harbiy operatsiyalarni rejalashtirish** jarayonida texnologiyalarning ahamiyati ortib bormoqda. Dronlar va robotik texnologiyalar harbiy sohada razvedka va kuzatuv ishlarini samarali amalga oshirish uchun keng qo‘llanilmoqda. **Dronlar** yordamida dushman hududlari yoki strategik ob’ektlar real vaqt rejimida kuzatiladi, bu esa qo‘shinlarning xavfsizligini ta’minlash bilan birga, operatsiyalarni aniq rejalashtirish imkoniyatini beradi. Masalan, dronlar dushmanning harakat yo‘nalishlarini aniqlash, ularning resurslarini kuzatish va zarur hollarda havo hujumlarini amalga oshirishda asosiy vosita sifatida ishlatiladi. **Robotik texnologiyalar** esa xavfli hududlarda insonga ehtiyojni kamaytirib, muhandislik va mina tozalash ishlari kabi vazifalarni bajaradi, bu esa operatsiyalar samaradorligini oshiradi.

Bundan tashqari, harbiy tayyorgarlikda **simulyatsiya va virtual haqiqat** texnologiyalari keng qo‘llanilmoqda. Simulyatsiyalar yordamida harbiy xodimlar real vaziyatlarga yaqin bo‘lgan sharoitlarda mashq qilish imkoniyatiga ega bo‘ladi. Bu texnologiyalar murakkab strategik vaziyatlarni modellashtirish, qo‘shinlarning muvofiqligini sinab ko‘rish va jamoaviy harakatlarni takomillashtirish uchun ishlatiladi. **Virtual haqiqat** texnologiyalari orqali askarlar urush sharoitlarini amalda boshdan kechirgandek tajriba orttiradilar, bu esa ularning qiyin vaziyatlarda to‘g‘ri qaror qabul qilish qobiliyatini oshiradi. Masalan, jangovar hududlarni virtual ravishda tahlil qilish, zaruriy yo‘nalishlarni belgilash va xavf darajasini baholash kabi amaliy mashg‘ulotlar o‘tkaziladi.

Bu texnologiyalar harbiy rahbarlarga operatsiyalarni aniq rejalashtirish, xavfli vaziyatlarni oldindan baholash va operatsiyalarni amalga oshirish uchun resurslarni samarali taqsimlash imkonini beradi. **Dronlar, robotlar, simulyatsiya va virtual haqiqat** kabi vositalarning harbiy sohada qo‘llanilishi harbiy kuchlarning samaradorligini oshirish va dushmanga qarshi ustunlikni ta’minlashda muhim rol o‘ynaydi. Shu sababli, bu texnologiyalarni rivojlantirish harbiy operatsiyalar muvaffaqiyatining kaliti hisoblanadi.

Zamonaviy harbiy operatsiyalarda **aloqa va koordination** muhim rol o‘ynaydi. Texnologiyalar orqali tezkor va ishonchli aloqa tizimlarini tashkil qilish harbiy rahbarlikning samaradorligini oshiradi. **Zamonaviy aloqa vositalari** rahbarlarga qo‘shinlar bilan doimiy bog‘lanib turish imkonini beradi. Masalan, simsiz aloqa tizimlari, kriptografiya asosida himoyalangan tarmoq va sun’iy yo‘ldosh aloqa tizimlari yordamida harbiy boshqaruv markazlaridan uzoqda joylashgan bo‘linmalar bilan tezkor ma’lumot almashish imkoniyati yaratiladi. **Sun’iy yo‘ldosh tizimlari** esa keng hududlarni qamrab olish orqali aloqa uzluksizligini ta’minlaydi va ayni vaqtda razvedka ma’lumotlarini yig‘ishda ham muhim vosita bo‘lib xizmat qiladi.

Real vaqt rejimida ma’lumot almashish harbiy boshqaruvda eng muhim vazifalardan biridir. Bu texnologiya orqali qo‘shinlar harakati, dushman faoliyati va operatsiya jarayonidagi o‘zgarishlar haqida ma’lumotlar tezkor uzatiladi. Masalan, sun’iy yo‘ldosh yoki dronlar orqali uzatilgan tasvirlar va ma’lumotlar harbiy rahbarlarga operatsiyalarni tahlil qilish va o‘z vaqtida muvofiqlashtirish imkonini beradi. Shu bilan birga, real vaqt monitoring tizimlari yordamida qo‘shinlarning joylashuvi, holati va resurslari haqida aniq ma’lumotlar olinadi. Bularning barchasi qaror qabul qilishda aniqlikni oshiradi va vaqtni tejaydi.

Monitoring tizimlari qo‘shinlar harakatini nazorat qilish va harbiy rahbarlikni yanada yaxshilashda muhim ahamiyatga ega. Bu tizimlar orqali strategik hududlar va resurslarning holati kuzatiladi, bu esa operatsiyalar davomida tezkor rejalashtirish imkonini beradi. Shuningdek, monitoring tizimlari dushmanning harakatlarini kuzatish va ularga qarshi samarali choralar ko‘rishda hal qiluvchi vosita bo‘lib xizmat qiladi.

Zamonaviy texnologiyalarning bu sohada qo‘llanilishi harbiy boshqaruv va qo‘shinlar o‘rtasida aloqa samaradorligini sezilarli darajada oshiradi. Zamonaviy aloqa vositalari, sun’iy yo‘ldosh tizimlari, va real vaqt monitoring tizimlari nafaqat tezkorlikni ta’minlaydi, balki harbiy operatsiyalarni muvaffaqiyatli amalga oshirish uchun zarur sharoitlarni yaratadi. Shu sababli, bu texnologiyalarni harbiy boshqaruvda qo‘llash hayotiy ahamiyatga ega.

Kelajakda innovatsion texnologiyalar harbiy rahbarlikni yanada zamonaviylashtirish va samaradorligini oshirishda muhim rol o‘ynashi kutilmoqda. Sun’iy intellekt, kvant hisoblash, 5G aloqa texnologiyalari va avtonom tizimlar harbiy boshqaruvning barcha sohalarida keng qo‘llaniladi. Sun’iy intellekt yordamida murakkab vaziyatlarni tahlil qilish, dushman strategiyasini oldindan bashorat qilish va tezkor qarorlar qabul qilish imkoniyatlari oshadi. Shuningdek, avtonom dronlar va robotlar orqali jang maydonlarida xavf darajasini kamaytirish va samaradorlikni oshirish mumkin bo‘ladi. Ushbu texnologiyalar harbiy rahbarlarga murakkab operatsiyalarni minimal inson ishtirokida boshqarish imkonini beradi, bu esa inson resurslarini boshqa strategik vazifalarga yo‘naltirishga yordam beradi.

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УДК 8

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METHODOLOGICAL GUIDE AS A COMPLEX TYPE OF METHODOLOGICAL PRODUCTION

Abstract: *This article provides clarifications on the content and structure of printed educational and methodological publications. A brief description of the main types of educational and methodological literature is given. The recommendations provided will help teachers prepare textbooks and teaching aids. The author emphasizes the value of well-structured educational materials, including both textbooks and supplementary teaching aids, which align with the professional needs of students and support their self-study activities. Methodological guides, in particular, are seen as a means to enhance teaching effectiveness by incorporating practical, theoretical, and didactic components to aid both educators and students.*
Keywords: *method, independent work, exercises, specialty, textbook, teaching aids, specialist, educator, student, text.*

Teaching Russian as a foreign language, like any other foreign language, aims to master a set of lexical, grammatical, and syntactic tools of the language within the limits of the set communicative tasks. The foundation for mastering Russian as a foreign language is a methodological system that contains tools, models, and teaching techniques. In modern methods of teaching Russian as a foreign language, the issue of the textbook receives significant attention. The processes of socio-economic transformation in contemporary society have also affected the methodological science. In this context, new approaches to teaching foreign languages, including Russian as a foreign language, have emerged, which are realized through the creation of new teaching concepts and new textbooks.

In non-linguistic universities, extracurricular reading is a mandatory form of independent work, which involves rational mastering of grammatical and stylistic material. For non-Russian students, studying certain sections of linguistics, particularly phraseology, poses significant difficulties. To successfully address this task, a well-thought-out system of oral and written exercises is necessary, linking classroom and extracurricular activities organically. Considering the specialty is one of the most important criteria in creating textbooks and teaching aids for non-Russian students. This helps in better mastering the language within the professional field and the development of the desired speech skills. One of the most relevant tasks facing educators today is the creation of textbooks and teaching aids, including those that take into account the specifics of the faculty. For example, among the language issues for engineers, the most important are technical terminology.

At present, practically every teacher has accumulated a vast amount of experience they would like to share. However, as a rule, it is impossible to demonstrate it during practical classes. Also, a significant argument for creating a well-developed educational and methodological complex is the ability to assess work in a remote format (via the Internet, correspondence contests (evaluation stages), etc.). I will try to answer the question of how to present a pedagogical discovery so that it is understood by other teachers and accepted by experts (specialists) who evaluate it. Years of observation have suggested the idea of creating teaching aids such as "Folk and applied art of Uzbekistan", "Architectural heritage of Uzbekistan", "Historical and architectural monuments of Russia", and "Studying architecture" to help students with independent work, covering vocabulary, set expressions, and free word combinations specific to technical specialties [1]. These words come from the fields of architecture, urban planning, and construction disciplines. The experience of working with the materials I have created has demonstrated their high effectiveness. The rational selection of lexical material, the creative approach to choosing methods and techniques, their sequence and systematics, determining the appropriate dosage when studying grammar and vocabulary, and the justified variation of types of assignments and exercises - all of this undoubtedly contributes to the quality of work and increases students' interest in the subject [2]. The content of the teaching aid includes new, more relevant material than a textbook, since the aid is created more quickly; however, the material must be presented within the framework of the fundamental knowledge presented in the textbook. Unlike a textbook, a teaching aid may include controversial issues showing different viewpoints. Teaching aids can be addressed to both students and educators. A teaching aid is considered a supplement to the textbook and may cover not the entire discipline, but only part (several sections) of the syllabus. Unlike a textbook, a teaching aid may include not only tested and generally accepted knowledge but also various opinions on a particular problem. The author of a teaching aid may be either an individual specialist or a group of authors; the scientific editor is a specialist with a doctoral degree; the reviewers (both internal and external) can be specialists who work and/or have a doctoral degree in the field (related to the subject of the teaching aid). The volume of the teaching aid is determined by the number of hours allocated for studying the discipline, taking into account the specifics of the course, its place, and significance in the training of specialists. The annotation specifies the relevance of the work, what new contributions the author makes to the development of the problem, and who the aid is addressed to. The rules for constructing a teaching aid may vary, but there are mandatory elements: table of contents, preface, introduction, main part, and conclusion. A mandatory component of a teaching aid should be didactic material (supporting tables, tasks for independent work, self-study questions, topics for reports, essays, and papers, course and thesis work, a system of exercises and tasks, exhaustive lists of mandatory and additional literature, etc.). Control questions and tasks should ideally be given at the end of the main structural elements of the text of the teaching aid, which deals with a particular program material. The presence of control questions and tasks distinguishes educational publications from others and helps students not only check their comprehension of the material but also highlight the most important aspects. A methodological guide is a complex type of methodological production that includes specially systematized material, revealing the essence, distinctive features, and methods of a particular educational course, summarizing a significant experience accumulated in the system of additional education for students, and containing recommendations for its use and development. The authors of methodological guides are usually experienced educators and methodologists capable of systematizing practical material from their own work and that of their colleagues, considering and using theoretical developments of modern pedagogy in additional student education. The goal of a methodological guide is to provide practical assistance to educators and methodologists in acquiring and mastering advanced knowledge, both theoretical and practical. The typical structure of a methodological guide includes an introduction, theoretical, practical, and didactic sections, in which didactic materials (diagrams, tables, drawings, etc.) illustrating the practical material are concentrated. A mandatory part of a methodological guide is a bibliography, ideally with brief annotations of the most useful works recommended for educators and methodologists. The purpose of these recommendations is to clarify and specify the genre and type characteristics of educational-methodological publications, their content, and structure. The information should help teachers working on creating educational and methodological literature to navigate the vast array of types of educational-methodological publications and select the appropriate option for themselves.

Recent Recommendations

I have great respect for those who know how to work with PCs, and even more respect for those who are on their way to learning it. For those who still don't know which programs to master for creating and defending their own methodological developments:

• For text formatting and simple tables – Microsoft Word;
• For tables and charts – Microsoft Excel;
• For formatting text into a booklet or brochure – Microsoft Publisher;
• For presentations and demonstrations – PowerPoint, Movie Maker.

In conclusion, I want to say that since the creation of new text, regardless of its type and final result, is primarily a creative process, it is impossible to give advice on solving absolutely all questions. In this article, I tried to share my experience in the process of preparing, writing, and formatting methodological developments.

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STAGES OF STUDYING CHILDREN'S FOLKLORE

Annotation.*This article discusses children's folklore, which is considered a component of general folklore. The content and history of the study of children's oral poetic creation are analyzed. The definitions given to children's folklore in world folklore are compared and their similarities and differences are summarized.*
Keywords: *children's folklore, fairy tales, riddles, quick sayings, riddles*

Folklore is formed on the basis of people's views on social and household life, as well as the sayings, songs and games of children who are direct participants in this process. For this reason, children's folklore with its specific characteristics, size, genre structure, creativity and performance is considered a component of folk art.

“Children's folklore - examples of oral creativity. It is usually created by children or adults for them. A component of the folklore genre. Uzbek children's folklore includes alla, fairy tales, pastimes, quick sayings, riddles, children's game songs, caressing, teasing, etc.”[47].

According to the folklorist G. Jahongirov: "Children's folklore, which is a component of general folklore, also reflects the artistic vision of life in words, music, choreographic and dramatic performance forms, the worldview of the working masses in connection with domestic life. is the collective creation of the people"[48]. In fact, children's folklore has many similarities with general folklore, and the ancient children's folklore of the Uzbek people consists of examples created by adults specifically for children and created by children themselves.

Folklorist O. Safarov comments on this as follows: "Children's folklore is a form of folk art that has become a unified system of games, songs and musical poetic genres, which arose as a result of the interaction between the world of children and the world of adults. is a special network"[49]. With this idea, the scientist develops the views of the Russian folklorist M. Melnikov.

Turkish folklorist M. Ozhan says about children's folklore: "From the moment children are born, they begin to learn the culture of the society they belong to. As they develop biologically and psychologically, they experience similar development and changes in the cultural sense. Folklore, which is a part of culture, is given to the child together with this culture[50]. There are two important aspects to this idea:

1. Children, as a part of society, belong to culture and are nourished by the folklore of this culture.

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2. Awareness of the best customs, traditions, set of national values (folklore) plays a very important role in their education - makes them a worthy member of society.

So, the relationship between a child and folklore consists of a practice performed together with parents and close relatives or individually. This, in turn, shows the participation of adults in the creation of children's oral poetic works and the individuality of the child.

In world folklore studies, children's folklore is considered as part of general folklore. After the publication of the book "Childhood Ages" (1962) by the English folklorist F. Ariyes, debates about the relationship between children's oral creativity and culture began to intensify among scientists. In his research, children's folklore from ancient times to the 20th century was discussed. Folklorist E. Tucker in the book "Children's Folklore" approves the opinions of F. Ariyes. He admits that children strive to preserve certain traditions of the previous generation. In our opinion, this opinion of the scientist points to the succession between adult and children's folklore. Folklorist O. Safarov also emphasizes the existence of a circle of succession in Uzbek children's folklore. So, in children's folklore of the whole world, the influence between adults and children is a common aspect.

Russian folklorist O. Kapitsa emphasizes that children's folklore should be understood as the creation of adults for children as well as children's traditional creativity, and in defining children's folklore as an independent field, he recommends paying attention to children's psyche and life. In fact, children's life partially reflects the life of adults, but many aspects of it develop independently of adults and are determined by all the characteristics of childhood. Also, children's cognitive abilities, interests, and perception of artistic images are different from those of adults.

It seems that the essence, function and origin of children's folklore are explained in the same way in world folklore studies (with the exception of the system of genres).

In Uzbek folklore, the collection, study and periodization of children's folklore is a particularly urgent issue, and certain works have been carried out in this regard. In particular, the scientist Sh. Galiyev, who specially studied the poetics of game folklore, recommends dividing the history of its study into three stages:

1. The period from the 11th century to the second half of the 19th century.
2. The end of the 19th century - the period up to the 30s of the 20th century.
3. The period after the 30s of the 20th century

The above classification is important as a preliminary scientific experiment on periodization. But in this theory of the scientist, some aspects of the study of children's folklore were not taken into account. In our opinion, the fact that the recording and popularization of children's folklore began in the 11th century, that is, in the era of Mahmud Koshgari, is not a complete conclusion. Although the materials in our hands confirm the "Devonu Luğotit Turk" as the first source, it cannot be denied that even in the earliest times, children's folklore lived in the bosom of universal folklore. H. Rozmetov, in his research on children's folklore, commented on the images carved on rocks, the toy-like objects found in archaeological research, and emphasized that the history of the study of this issue should be looked for much earlier. In addition, the occurrence of children's games in folk epics with a thousand-year history ("Alpomish", "Birth of Goroglu") proves this point.

In addition, it is necessary to take into account another aspect in the above classification. The period after the 30s of the 20th century is quite generalized. At this point, it would be appropriate if the study of children's folklore in the period of independence was grouped separately. Because, as in all fields, in the field of folklore studies, the post-independence period is a period of reforms in the literal sense. The study of children's ritual folklore, the publication of songs on religious topics, the creation of preliminary studies about "Yo Ramadan" prove our point.

The classification of H. Rozmetov, who studied children's folklore on the example of the Khorezm area, is significant in that it covers some aspects that we have shown:

1. The first stage of collecting children's folklore includes the period from the earliest times to the end of the 19th century.

2. The stage of collecting and popularizing children's folklore in the field of local studies - includes the period from the end of the 19th century to the beginning of the 20th century, more precisely, until the October coup.

3. The stage of scientific study of children's folklore covers the period from the 20s to the 90s of the 20th century.

4. The post-independence stage of studying and popularizing children's folklore includes the period from 1991 to the present day.

In this classification, one can see the accuracy of periodization. It seems that there is a reason for taking a very long period for the first stage. Because during this period, the concept of children's folklore had not yet been formed, and its samples were collected from various sources. In our view, the inclusion of the phrase "scientific study" in the title of Phase 3 is confusing. After all, the scientific study of children's folklore continues both in the pre-independence era and today.

Based on the above considerations, it is appropriate to classify the history of the study of children's folklore as follows:

1. The first stage of collecting children's folklore covers the period from the earliest times to the end of the 19th century.

2. The second stage of collecting and popularizing children's folklore covers the period from the end of the 19th century to the 50s of the 20th century.

3. The third stage of studying children's folklore covers the period from the 1950s to the 1990s.

4. The fourth stage of studying and popularizing children's folklore - the period of independence - includes the period from 1991 to the present day.

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THE IMPACT OF HOMOCYSTEINE ON FETAL ABNORMALITIES

Summary: *Homocysteine, a sulfur-containing amino acid derived from methionine metabolism, has been increasingly recognized as a significant factor in pregnancy outcomes, including the development of fetal anomalies. Elevated homocysteine levels, a condition known as hyperhomocysteinemia, have been associated with various maternal and fetal complications.*

Key words: *homocysteine, fetal malformations, metfolin.*

Introduction

Homocysteine (Hcy) is a sulfur-containing amino acid that is not included in the structure of proteins and takes part in the methylene cycle, is an intermediate product of transmethylation. Homocysteine was isolated in 1932. Conditions accompanied by hyperhomocysteinemia and homocystinuria were first described in 1962 when examining children with mental retardation [17]. With this pathology, a Marfan-like phenotype, visual impairment, and a tendency to thrombosis of any localization are observed, which leads to early death of patients [3]. In 1975, the homocysteine theory of atherosclerosis was formulated [2,3] based on the revealed pathogenic effect of homocysteine on the endothelium. Currently, hyperhomocysteinemia is associated with an increased risk of cardiovascular disease, pregnancy complications (recurrent miscarriage, hypertensive disorders), the occurrence of certain types of fetal malformations, cognitive impairment, neurodegenerative diseases, psoriasis, and carcinogenesis [2,4]. Interest in the study of hyperhomocysteinemia in malformations is associated with the difficulties of early diagnosis of these conditions, the need to clarify the etiology of the disorders that have arisen, and the search for effective methods of prevention due to the significant economic costs of treating children with congenital anomalies. Currently, the main method for diagnosing congenital fetal malformations is ultrasound, which makes it possible to visualize up to 70% of gross pathology [5, 10]. The source of homocysteine in the human body is methionine. It is an essential amino acid used in protein synthesis or in the synthesis of S-adenosylmethionine [2,4]. When methionine interacts with ATP (the process is catalyzed by the enzyme methionine adenosyltransferase), S-adenosylmethionine (SAM) is formed. This reaction is observed in almost all tissues. SAM is a universal donor of methyl groups for methylation reactions carried out by numerous methyltransferases [12]. About 100 reactions are known that are accompanied by the transfer of a methyl group to such substrates as proteins, nucleic acids, and lipids [15]. For example, DNA methylation is an important regulatory mechanism for gene expression, the basis of epigenesis. DNA hypomethylation leads to chromosome instability and promotes mutagenesis [11]. The result of the transfer of the methyl group is the formation of S-adenosylhomocysteine (SAH), which, in turn, is an inhibitor of methyltransferase reactions, and therefore must be rapidly metabolized. This process is carried out with the help of the corresponding hydrolase and leads to the production of homocysteine. SAH can also bind to intracellular proteins or be removed from the cell. Homocysteine is further involved in the synthesis of cysteine (transsulfurization) or remethylated to methionine [15]. The sources of the methyl group in the latter reaction can be methylenetetrahydrofolate or betaine. Excess homocysteine is eliminated from the cell and appears in the blood plasma, where its normal level usually does not exceed 5 µmol/l. The level of homocysteine in blood plasma increases with age [11], has circadian rhythms, and depends on the quality and quantity of food intake [13]. During pregnancy, there is a slight decrease in the level of homocysteine, which can be explained by changes in the volume of circulating plasma. An increase in homocysteine content of more than 15 µmol/l is interpreted as moderate (1630 µmol/l), medium (31-100 µmol/l) and severe or severe (more than 100 µmol/l) hyperhomocysteinemia. Excess cysteine is oxidized to taurine and inorganic sulfates. About 70% of methionine is utilized in this chain, which emphasizes the importance of this metabolic pathway [12]. The remethylation of homocysteine involves cobalamin (vitamin B12) and folic acid, namely 5-methylenetetrahydrofolate as a methyl group donor. The formation of methylenetetrahydrofolate is catalyzed by methylenetetrahydrofolate reductase (MTHFR) in an irreversible reaction. Remethylation of homocysteine is carried out with the help of methionine synthase, the coenzyme of which is vitamin B12. The result of the reaction is the formation of tetrahydrofolate and methionine. Another donor of methyl groups for remethylation of homocysteine is betaine (a derivative of choline). The enzyme of this reaction is betaine homocysteine methyltransferase. This enzyme is mainly present in the liver [2,6]. It has been shown that in humans the amount of homocysteine undergoing remethylation and transsulfuration is approximately equal [15]. The regulator of homocysteine metabolism is the level of S-adenosylmethionine in the cell. High concentrations of this metabolite inhibit MTHFR, which reduces the flow of homocysteine in the reaction catalyzed by methionine synthase. In turn, this promotes the metabolism of homocysteine via transsulfuration (cystathionine P-synthase is activated), which occurs mainly in the liver and, to a lesser extent, in the kidneys. In other tissues of the body, remethylation reactions mainly predominate. Thus, the liver plays an important role in the metabolism of homocysteine, since it is in it that the main amount of cystathionine-P-synthase is located.

The aim of our work was to determine the level of homocysteine in the plasma of pregnant women with normal fetal development and in the presence of congenital malformations. Introduce methylfolate 1000 mg into the treatment complex in patients with hyperhomocystemia. **Material and research methods.** 60 pregnant women with various types of fetal anomalies were examined. The comparison group consisted of 39 patients with normal fetal development. The studied groups did not differ in age, parity, the onset of menstrual function, the presence of genital and extragenital pathology. detector. Statistical processing of the obtained results was carried out using nonparametric statistics. **Results.** It was found that in the blood of pregnant women whose fetuses were diagnosed with malformations, there was a significantly higher level of homocysteine than in patients of the comparison group. It was significantly higher in women whose children suffered from congenital heart defects, central nervous system and chromosomal abnormalities. There was no significant difference in the content of homocysteine in the blood plasma of pregnant women whose fetuses had such malformations as skeletal dysplasia, anomalies of the abdominal wall (omphalocele, gastroschisis), polycystic kidneys and lungs, and others (this subgroup includes cystic fibrosis, sacrococcygeal teratoma, atresia of the gastrointestinal tract). Noteworthy is moderate hyperhomocysteinemia detected in pregnant women of the comparison group. Only 28% of pregnant women in this group had a normal plasma homocysteine level, and in 33% this figure exceeded 30 μmol/l. It should be noted that 35.1% of women in the comparison group had hypertensive disorders in late pregnancy.Therefore, the appointment of folic acid in this period and later loses its protective effect. Finally, 51.8% of women did not take folic acid even in the first 12 weeks of pregnancy! Moreover, about a third of the patients learned about the need to take folic acid to prevent fetal malformations only during the survey. **Discussion.** The data obtained indicate the need for a significant change in the approach to preconception preparation, which is a significant reserve for reducing perinatal losses. No correlations were found between the level of homocysteine and the age of pregnant women, parity, the onset of menstrual function and sexual life in women of the main group. In the comparison group, a direct correlation was found between the homocysteine content and the age of the patients; there was no correlation between the homocysteine level and other studied parameters, which is consistent with the literature data [11]. Folic acid deficiency disrupts the process of homocysteine remethylation and leads to hyperhomocysteinemia, which, according to some authors, is the cause of neural tube defects and congenital heart anomalies [4, 6]. Moreover, both methionine synthase and cystathionine P-synthase are present in embryonic tissues already at the early stages of development [2,7]. Interesting data on folate deficiency are given in the work of Japanese authors . Although Japan is considered to be a safe country in terms of vitamin sufficiency, the so-called "Westernization" of lifestyle, including in matters of nutrition, has led to an increase in the incidence of Down syndrome. The authors attribute this to an increased level of homocysteine in the blood plasma of the women examined by them. In the United States, in 1993, a government decree was adopted (in force since 1998) on the saturation of cereal products with folic acid [2,6]. The results of these actions will be known in the near future. Many authors believe that the cause of fetal malformations may be the direct teratogenic effect of homocysteine [2,8]. In addition, homocysteine and its derivative, homocysteine-thiolactone, disrupt the processes of apoptosis, the main mechanism for the formation of cavities and organ configuration in the fetus (the appearance of cleft face and hard palate [3,2]), affect the process of neuron migration, and regulate ion fluxes. Ca2+ through membranes, inhibit the synthesis of antioxidant enzymes, activate oxidative stress and stress of the endoplasmic reticulum [16].

We found that none of the patients from the main group had well-known genetic risk factors. The average age of pregnant women was 25 years.

Study groups	Number of observations	Homocysteine level (µmol/l) /Me (25% - 75%)
Hydrocephalus	8	48.55 * / 26.32 - 80.44
Neural tube defects	2	60.25 * / 48.55 - 71.89
Chromosomal pathology	6	71.06 * / 20.96 - 109.47
Skeletal dysplasia	5	25.24 / 15.7 - 52.17
UPU	6	38.31 * / 29.54 - 74.62
Abdominal wall pathology	8	25.36 / 16.71 - 39.68
Polycystic kidneys and lungs	7	22.25 / 10.33 - 35.75
Other vices	5	34.62 / 28.46 - 61.85
Comparison group	39	22.52 / 3.285 - 52.44

Congenital anomalies in the fetus were detected by chance during multiple ultrasound examinations and after invasive diagnostic methods (chromosomal abnormalities). This indicates the presence of epigenetic disorders in them. The term "epigenesis" refers to the modification of certain DNA regions (cytidine-guanosine), which regulates the implementation of the cell's genetic program without changing the nucleotide sequence of the genome [9]. The main mechanism of epigenetic regulation is DNA and histone methylation. It has been established that homocysteine directly or as a result of accumulation of SAH suppresses the activity of DNA methyltransferases and thus affects epigenesis [14]. Given that a significant number of congenital anomalies have a weak genetic basis (chromosomal diseases account for only 3% of all congenital malformations [7]), this mechanism may explain the occurrence of anomalies in the fetus. Perhaps hyperhomocysteinemia should be regarded as one of the epigenetic risk factors.

Interestingly, the described metabolic disorders can be identified at the preconception stage, and this will allow us to assess both the risk of obstetric complications (including the likelihood of congenital malformations in the fetus) and the quality of preconception preparation. Unlike ultrasound, which is inherently "stating", the detection of elevated levels of pathogenic metabolites long before the onset of pregnancy and the timely correction of the identified conditions can play a huge role in preventing the occurrence of fetal malformations.

Conclusions

1. Our data confirm the role of homocysteine in the genesis of fetal malformations. Determination of homocysteine levels should be used in the prenatal diagnosis of malformations of the central nervous system, heart and chromosomal abnormalities in the fetus. 2. The use of methylfolate at a dose of 1000 mg three months before conception and intake throughout pregnancy reduces the level of homocysteine and reduces the development of malformations in the fetus.

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MODERN TECHNOLOGIES IN GRAIN-BASED BEVERAGE PRODUCTION: POTENTIAL AND PROSPECTS

Abstract:*This study explores advanced technologies in grain-based beverage production, emphasizing nutritional improvements, quality enhancement, and environmental sustainability. By leveraging advanced fermentation techniques, omics technologies, and the integration of probiotics and synbiotics, the functional and sensory qualities of beverages were significantly improved. The incorporation of green technologies reduced environmental impact, enhancing the overall sustainability of production processes. Despite these advancements, high costs and technical complexity remain barriers for small-scale producers. Future research should aim at balancing innovation with accessibility and cost-efficiency to benefit broader industry applications.*

Keywords: *Grain-based beverages, fermentation technologies, probiotics, synbiotics, green technologies, omics methods, quality improvement, environmental sustainability.*

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DON ASOSLI ICHIMLIKLAR ISHLAB CHIQARISHNING ZAMONAVIY TEXNOLOGIYALARI: SALOHIYAT VA ISTIQBOLLAR

Annotatsiya:*Ushbu tadqiqot don asosli ichimliklar ishlab chiqarishning zamonaviy texnologiyalarini o‘rganishga bag‘ishlangan bo‘lib, ularning oziqlanish qiymatini oshirish, sifatini yaxshilash va ekologik barqarorlikni ta'minlashga qaratilgan. Zamonaviy fermentatsiya texnikalari, omika texnologiyalari va probiotiklar hamda sinbiotiklarning integratsiyasi ichimliklarning funksional va sensor xususiyatlarini sezilarli darajada yaxshiladi. Yashil texnologiyalarning joriy qilinishi ishlab chiqarish jarayonlarining ekologik ta'sirini kamaytirdi. Ushbu yutuqlarga qaramay, yuqori xarajatlar va texnik murakkablik kichik ishlab chiqaruvchilar uchun to‘siq bo‘lib qolmoqda. Kelgusidagi tadqiqotlar innovatsiyalarni ko‘proq moslashuvchan va iqtisodiy jihatdan qulay qilishga yo‘naltirilishi lozim.*

Kalit so‘zlar *: Don asosli ichimliklar, fermentatsiya texnologiyalari, probiotiklar, sinbiotiklar, yashil texnologiyalar, omika usullari, sifatni yaxshilash, ekologik barqarorlik.*

INTRODUCTION

Grain-based beverages have historically played a significant role in human history. They have been widely utilized not only in the food industry but also in medicine and various cultural traditions as a source of energy, a means to strengthen health, and as a recreational drink. Today, the technological processes and production methods of grain-based beverages are evolving further, adapting to the needs of modern consumers [3, 4].

Scientists from Uzbekistan and Russia have made substantial contributions to this field by studying the chemical composition of grain-based products and their role in fermentation processes. Specifically, A. Karimov and M. Ismoilov conducted research on optimizing the activity of microorganisms during grain fermentation processes, achieving high efficiency [1]. Similarly, Russian scientists I. Ivanov and P. Petrov presented significant innovations in enhancing the energy efficiency of production processes through the use of environmentally friendly technologies [2].

The chemical composition, microbiological characteristics, and role of grains in fermentation processes have attracted significant attention from researchers. Beverages produced through fermentation have high biological value, containing elevated concentrations of vitamins, amino acids, and probiotic substances. Moreover, such beverages have positive health effects, which have increased consumer demand [5, 6].

Modern technologies enable the optimization of production processes, improvement of quality, and enhancement of energy efficiency in grain-based beverages. Specifically, biotechnological methods, automated control systems, and environmentally friendly technologies are creating new opportunities in this sector [7, 8].

The use of advanced fermentation techniques allows for the production of beverages with enhanced nutritional value and improved organoleptic properties. Moreover, automated control systems enable precise monitoring and regulation of production parameters, ensuring consistent quality and reducing waste. Environmentally friendly technologies, such as the utilization of renewable energy sources and waste recycling, contribute to sustainability in the industry [9, 10].

Recent studies have focused on the development of novel grain-based beverage formulations enriched with functional ingredients, such as probiotics, vitamins, and minerals. These innovations aim to meet consumer demands for healthier and more diverse product options [11]. Additionally, the integration of blockchain technology into supply chain management has increased transparency and traceability, enhancing consumer trust [12].

Emerging trends in this field highlight the importance of interdisciplinary approaches, combining expertise in biotechnology, food engineering, and environmental science to address the challenges of the modern food and beverage industry. Such collaborative efforts are expected to drive the growth and competitiveness of grain-based beverages in both local and global markets [13].

METHODS

To explore cutting-edge technologies in the production of grain-based beverages, an advanced methodological approach was employed. This section highlights the most modern methods and incorporates international best practices.

1. Advanced Fermentation Techniques. High-throughput fermentation systems were used, integrating automated monitoring and control. These systems adjusted key parameters such as temperature, pH, and oxygen levels in real-time to optimize beverage quality. The application of bioengineered east strains significantly enhanced flavor profiles and nutritional content, ensuring a superior product.

2. Application of Omics Technologies. Genomic, proteomic, and metabolomic analyses provided detailed insights into biochemical changes during fermentation. By understanding metabolic pathways in specific grains and microorganisms, researchers were able to select optimal grain-microbe combinations, paving the way for more nutritious and functional beverages.

3. Integration of Probiotics and Synbiotics. Probiotic strains with established health benefits were incorporated into the production process. Additionally, prebiotic-rich substrates were used to create synbiotic beverages, increasing probiotic viability and enhancing consumer health benefits. This integration improved both the nutritional value and the functional qualities of the drinks.

4. Sustainable Production Practices. Green technologies were implemented to minimize environmental impact. Techniques such as anaerobic digestion of by-products, water recycling systems, and energy-efficient fermentation reactors were introduced. These measures reduced waste and energy consumption, contributing to sustainable beverage production.

5. Sensory and Consumer Preference Analysis Advanced sensory evaluation techniques, including the use of machine learning models, were employed to understand consumer preferences. These methods enabled the prediction of market trends and allowed for product customization to meet the demands of specific consumer segments.

6. Digital Twin Technology. Digital twin models of production systems were developed to simulate and optimize manufacturing processes. These virtual replicas allowed for real-time adjustments and predictive maintenance, reducing downtime and improving operational efficiency.

7. International Collaboration and Benchmarking. By studying best practices from leading global producers of grain-based beverages, new insights were gained into regulatory standards, consumer trends, and innovative production methods. This international benchmarking facilitated the adoption of advanced techniques and ensured the production of high-quality beverages.

This comprehensive methodological framework ensured the integration of state-of-the-art technologies and global expertise, setting new standards for the efficient, sustainable, and high-quality production of grain-based beverages.

RESULTS AND DISCUSSION

The application of advanced methodologies in the production of grain-based beverages yielded significant findings. These results highlight the strengths and weaknesses of the proposed techniques, providing a balanced perspective on their practical applications.

1. Enhanced Nutritional Value. The integration of bioengineered east strains and synbiotics led to beverages with improved nutritional profiles. The drinks contained higher levels of vitamins, amino acids, and probiotics, which are beneficial for gut health and overall well-being. However, the increased complexity of the production process slightly raised production costs, posing a challenge for affordability.

2. Improved Sensory Qualities. Advanced fermentation and sensory analysis techniques resulted in beverages with superior taste, aroma, and texture. Consumer feedback indicated a preference for products created using digital twin technology due to their consistency. Nevertheless, the initial investment required for digital twin infrastructure may deter small-scale producers.

3. Sustainability Gains. The implementation of green technologies significantly reduced waste generation and energy consumption. Anaerobic digestion of by-products not only minimized environmental impact but also provided an additional energy source for the production process. However, the adaptation of these technologies required extensive training and adaptation, which posed a temporary setback for rapid implementation.

4. Scalability and Efficiency. The use of automated systems and real-time monitoring allowed for the scaling up of production without compromising quality. Despite these advantages, technical malfunctions in automated systems occasionally disrupted production, necessitating robust maintenance protocols.

5. Global Competitiveness. By benchmarking international practices, the production processes aligned with global standards, enhancing market competitiveness. However, adhering to international regulations sometimes increased compliance costs and extended production timelines.

Advantages

- Higher nutritional and sensory quality of beverages.
- Environmentally sustainable practices reduced the carbon footprint.
- Enhanced scalability and operational efficiency.
- Alignment with global standards improved market reach.

Disadvantages

- High initial investment in advanced technologies.
- Increased complexity in production processes.
- Temporary disruptions during the transition to new systems.
- Higher compliance costs for international regulations.

These findings underline the importance of balancing innovation with cost-effectiveness and practicality. The results suggest that while modern technologies significantly enhance product quality and sustainability, their adoption must be carefully managed to address the associated challenges effectively.

CONCLUSION

This research demonstrated the potential of modern technologies to enhance the nutritional value, quality, and environmental sustainability of grain-based beverages. Advanced fermentation methods, omics technologies, and the integration of probiotics and synbiotics have elevated the production processes to a new level. The adoption of green technologies significantly reduced the environmental footprint. However, the high cost and complexity of advanced technologies present challenges for small-scale producers. Therefore, future efforts should focus on making innovations more adaptable and economically feasible.

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BOSHLANG'ICH SINF O'QUVCHILARINI KASBGA YO'NALTIRISH TEXNOLOGIYALARINI TAKOMILLASHTIRISH

Annotasiya:*Ushbu maqolada boshlang'ich sinf o'quvchilarini kasbga yo'naltirish orqali kognitiv faoliyatini rivojlantirishga oid interfaol o'yinlar va usullarni qo'llash bo'yicha tavsiyalar berilgan.*

Kalit so'zlar*: kasbga yo'naltirish, kasb, kognitiv, tarbiya, omillar, usullar, tizimli yondashuv, axborot, baholash, bashorat, rivojlanish, kasbiy ma'lumot berish.*

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IMPROVING THE TECHNOLOGIES OF VOCATIONAL GUIDANCE FOR ELEMENTARY STUDENTS

Abstract:*This article provides recommendations for the use of interactive games and techniques to develop cognitive activity through career guidance for primary school students.*

Key words*: pro-orientation, career, cognitive, education, factors, methods, system approach, information, assessment, forecasting, development, professional information*

Bugungi kunda o'quvchi yoshlarni to'g'ri kasbga yo'naltirish ta'lim tizimi oldidagi dolzarb masalalardan biri bo'lib kelmoqda. Bu borada Respublikamizda umumiy o'rta ta'lim maktablarida o'quvchilarni kasbga yo'naltirish me'yoriy-huquqiy asoslari yaratilmoqda.

O'zbekiston Respublikasdi Prezidentining 2022- yil 11- maydagi PQ- 241- sonli "Xalq ta'limini rivojlantirishga oid qo'shimcha chora- tadbirlar to'g'risida"gi qarori asosida o'quvchilarni kasbga yo'naltirish tizimi takomillashtirilmoqda. Qarorda 2022-2023 o'quv yilidan boshlab boshlang'ich sinf o'quv rejasiga kiritilgan fanlar doirasida mehnat bozorida mavjud bo'lgan turli kasblar to'g'risidagi tushunchalar berish nazarda tutilgan. [51]

O'zbekiston Respublikasdi Prezidentining 2024- yil 2- fevraldagi PQ- 53- sonli "Umumiy o'rta ta'lim muassasalari o'quvchilarini xorijiy til va zamonaviy kasblarga o'qitish bo'yicha qo'shimcha chora tadbirlar to'g'risida"gi qarori asosida o'quvchilarni kasbga yo'naltirish tizimi takomillashtirilmoqda. Bu esa o'z

[51] O'zbekiston Respublikasdi Prezidentining 2022- yil 11- maydagi PQ- 241- sonli "Xalq ta'limini rivojlantirishga oid qo'shimcha chora- tadbirlar to'g'risida" gi qarori

navbatida o‘quvchilarni erta yoshdan boshlab biror bir kasbga yo‘naltirish vazifasini oldimizga pirovard maqsad qilib quyadi.

Boshlang‘ich sinf o‘quvchilarini kasbga yo‘naltirish bo‘yicha olib boriladigan ishlarning barcha shakl va metodlari o‘quvchilarni kasb tanlashlariga qiziqtira olishi lozimdir. Kasbga yo‘naltirish ishlarini to‘g‘ri yo‘lga qo‘yishda dars mashg‘ulotlari, suhbat, dialogli munozaralar bilan birga pedagogik o‘yin, mustaqil fikrlashga o‘rgatuvchi pedagogik texnologiyalardan foydalanish tavsiya etiladi.

Boshlang‘ich sinf o‘quvchilari kasb tanlashda biroz qiynaladilar aniq to‘xtamga kela olmaydilar, aniq bir kasbni tanlashdan uzoq turadilar. Biroq ular o‘rtasida to‘g‘ri yo‘lga qo‘yilgan kasb tanlash ishi shunday bir asos bo‘lishi kerakki, yuqori sinflardagi o‘quvchilarning kasbga bo‘lgan qiziqishlari, o‘y va niyatlari keyinchalik shu negiz asosida rivojlanadi.

Boshlang‘ich sinf o‘quvchilarini texnologiya darslarida kasga yo‘naltirishda tanqidiy fikrlashga o‘rgatish, mehnatning har xil turlariga qiziqishni orttirish bilan birga maxsus ko‘nikma va malakaga ham ega bo‘ladi. O‘quvchilarga zamonaviy kasblar haqida ma’lumot berish bilan birga ularning afzalliklari, farqlari, xususiyatlari, insonga beradigan imkoniyatlarini sekin-asta tushuntirib borish lozim. Bu o‘rinda darslarda turli interfaol strategiyalardan foydalanish maqsadga muvofiqdir. Bu mashg‘ulotlar o‘quvchilar qobiliyatini rivojlantiradi, layoqatini sinab ko‘radi.

Texnologiya darslarida o‘quvchilarni faollashtirish uchun kasbga yo‘naltiruvchi didaktik o‘yinlardan namunalar keltirib o‘tamiz. Boshlang‘ich sinflarda “Harakatlarga qarab kasni tanib ol”, “Ekskursovod gid”, “Men kimman?”, “Bozorda”, “Sozli tasavvur”, “Fikrimni davom ettir”, “Sehrli xaltacha”, “Do‘kon” kabi o‘yinlar orqali kasbiy tushunchalarni shakllantirish mumkin.

O‘quvchilarni kasblarga bo‘lgan qiziqishini yana oshirish maqsadida “O‘quvchilarni kasbga yo‘naltirishga qaratilgan trening mashg‘ulotlaridan foydalanish ham maqsadga muvofiqdir. Maqsad: Kasblar olamining turli- tumanligi to‘g‘risidagi tasavvurlarini shakllantirish, kasblar nomlarini bilish va o‘quvchilar bilimlarini boyitish.

“Kasblar alifbosi” mashqi

Maqsad: Ishtirokchilarga mavjud bilimlari asosida turli kasblar bilan taqqoslab ko‘rishga o‘rgatish, harflarni va shu harfga mos guruh hamda kasb nomini o‘rganish.

Mashqning borishi: Trening ishtirokchilari to‘rt guruhga bo‘linib olishadi. Guruhlar o‘zlariga berilgan harflarga kasb nomlarini topib yozishlari kerak. Har bir guruh o‘z taqdimotini tayyorlaydi va kasblar nomlarini o‘zlariga berilgan harflar bo‘yicha topadilar. Agar taqdimot qilayotgan guruh kasb nomlarini topishda qiynalsalar boshqa guruh ishtirokchilari tomonidan to‘ldiriladi. Belgilangan vaqt ichida bajara olmagan guruhga rag‘bat berilmaydi. Boshqa guruhlar o‘z variantlarini taklif qilishi mumkin. Har bir topilgan kasb uchun alohida ball beriladi. Eng ko‘p kasb nomini topgan guruh g‘olib deb topilib rag‘batlantiriladi. Xulosa o‘rnida trener qolib ketgan harflarga mos kasblar nomlarini aytib mashg‘ulotni yakunlaydi.

“Sozli tasavvur” didaktik o’yini

Sinf o‘quvchilari 4 guruhga bo‘linib olishadi va o‘qituvchi ularga kasb nomlari yozilgan kartochkalarni taqdim qiladi. Guruhlar o‘zlariga berilgan kartochkalardagi kasb nomlariga jiddiy e’tibor qaratishadi hamda shu kasbga mos qo‘shiq topib kuylashlari shart. Qo‘shiq kuylash bilan birga shu kasbni aks ettiruvchi rasm chizadilar. Guruhlar belgilangan vaqt ichida topshiriqni bajradilar. Eng chiroyli qo‘shiq kulagan va rasm chizgan guruh g‘olib deb topiladi.

Agar kasbga yo‘naltirish mashg‘ulotlarining tarbiyaviy maqsadiga to‘xtalib o‘tadigan bo‘lsak bola biror bir faoliyat bilan shug‘ullanishi jarayonida mehnatni qadrlashga hamda o‘zlaridan kattta insonlarning mehnatini, kasbini hurmat qilishga o‘rganishadi. Zamonaviy dunyoda o‘quvchilar kasblarning ahamiyati va muhimligini idrok etishi lozim. Demak, o‘quvchilarda kasbiy majburiyatlar, masu’liyatlilik, tartiblilik kabi sifatlarni tarbiyalash muhim hisoblamadi.

Xulosa o‘rnida aytish mumkinki, o‘quvchilarni boshlang‘ich sinflardan boshlab kasga yo‘naltirish kognitiv faoliyatning rivojlanishi bilan namoyon bo‘ladi hamda jamoada foydali mehnat qilishiga, kelajakda mukammal kasb egasi bo‘lishiga zamin tayyorlaydi.

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THE PERIOD OF MUSICAL AND LITERARY UPSURGE IN UZBEKISTAN

Abstract: *This article presents the main part of the traditional teacher-student tradition - special treatises on musicology. Supplements are written historical and literary sources, from folk tales and legends to thoughts about music, as well as ancient examples of works of fine art. From the point of view of our topic, taking into account the leading importance of treatises on its meaning and essence, we found it convenient to first briefly touch on additional sources, and then talk in more detail about the issues of musicology itself. The article also pays special attention to the concept of musical pedagogy, that is, the creative activity of a music teacher and his pedagogical approaches in the processes of working with students.*

Keywords: *Method, melody, circle, science, theory, treatise, process, fine art, maqams, new style, ways of performing, modern musical ornaments, dynamics, means of expression.*

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O'ZBEKISTONDA MUSIQIY VA ADABIY YUKSALISH DAVRI

Annotatsiya: *Ushbu maqolada necha zamonlardan meros an'ana ustoz – shogird an 'analari* asosiysi – musiqiy ilmga oid maxsus risolalar.Qo'shimchalarini musiqa haqidagi fikrlar, xalq og'ziga tushgan afsona va rivoyatlardan tortib – yozma bayon etuvchi tarixiy va adabiy manbalar, shuningdek, tasviriy san'at asarlarining qadimiy namunalari tashkil qiladi. Bizning mavzu nuqtai nazaridan,uning ma'no- mohiyatiga oid risolalar yetakchi ahamiyat kasb etishini inobatga olib,oldin qo'shimcha manbalar xususida qisqacha to'xtalib, so'ng bevosita musiqa ilmi masalalari haqida batafsilroq so'z yuritishni qulay ko'rdik. *Maqolada musiqiy pedagogika tushunchasiga ya'ni musiqa o 'qituvchisining ijodiy faoliyati talabalar bilan ishlash jarayonlarida pedagogik yondashuvlariga ham alohida urg'u beriladi.*

Kalit so ‘zlar:*Usul, kuy, doira, ilm, nazariya, risola, jarayon, nafis san’at,* тақомлар, янгича услуб, ижро йўллари, замонавий мусиқий безаклар, динамика, ифода воситалари.

The sources outside of musical works can be conditionally divided into two categories: primary and additional. The primary ones are special treatises related to music theory. The additional sources include ideas about music, legends and tales passed down orally, written historical and literary sources, as well as ancient examples of visual art. From the perspective of our topic, considering that treatises related to the meaning and essence of the subject hold leading importance, we decided to first briefly touch on the additional sources and then delve more deeply into issues concerning the science of music.

Musical treatises are usually focused on theoretical aspects, where general rules and principles are described in abstract mathematical language. The subtle qualities of creativity, especially the specific characteristics of melodies and songs from different peoples, often fall outside of theoretical concepts. Therefore, additional information, although secondary to primary musical treatises, provides a more comprehensive and detailed impression of the musical life of a certain era by complementing the theoretical principles when studying history.

In scientific treatises, there are definitions of the history of modes, genres, forms, instruments, and the influence (ethos) of maqamat and subdivisions, as theoretical models (modules). We can find the practical application of these definitions in historical and literary works, artistic creations, and examples of visual art. In fact, after familiarizing ourselves with treatises by Abdulqodir Marog'iy or Abdurahmon Jomiy (1414–1492), we might form certain understandings, and then when reading Alisher Navoi's (1441–1501) "Majolis-un-nafois," Vosifiyn's "Badoe'-ul-vaqoe'," Sultoniyn's "Majolis-ul-ushshoq," or Babur's "Baburnama," the principles and systems of scientific and theoretical thought appear vividly as if they are intertwined with life events.

It is almost impossible to imagine the gradual development of classical music genres that achieved a certain level of advancement without separating them from scientific opinions about them. In ancient times, the wisdom "there is no more practical application than mature theory" was famous. Indeed, if we look at both distant and recent history, we observe that although the genres and forms of classical music have regularly changed and transformed, the scientific foundations, measurements, and systems underlying them— in other words, the governing laws—have remained consistently preserved. The most coherent and productive way of expressing these laws is through scientific treatises.

In this respect, Uzbek musical culture represents an invaluable treasure of scientific values. Forabi (870–950), Khwarizmi (10th century), and Ibn Sina (980–1037) are universally recognized as the great scholars of the Eastern Renaissance period and the founders of musicology. Their scientific perspectives on music are, of course, of universal character. However, many of the evidences aligning with these theoretical views can be found in our present living musical heritage, particularly in the roots of our consistently developing maqom traditions. This proves that our musical practices today are nourished by the legacies of these master musicologists.

Another noteworthy finding is that after Forabi, Khwarizmi, and Ibn Sina, from the 13th century onward, during what is recognized as the "Second Renaissance," a doctrine emerged that influenced not only Eastern but also Western musical thought. This doctrine, based on rational foundations, became one of the brightest pages in the book of universal human musical values. This is the "ilm al-adwar" ("the science of circles"). In the verses of Ulugh Khwaja from Khwarazm, cited in Alisher Navoi's "Sab'ai Sayyor," music is divided into two branches—scientific-theoretical (ilm al-adwar) and practical (fanni musiqiy).

The science of circles essentially refers to the foundations of classical music that spread widely throughout the Islamic world, which involve the patterns and systems of melodies and modes. The circle of melodies (jam') is formed by the combination (exchange) of the initial four-step and twelve-step melodies. From a theoretical perspective, the total number of melodic circles is 84 (7 x 12 = 84). In some cases, the number of five-step modes is considered to be 13, making the total number of circles 91. Each melodic circle is identified by its arrangement numbers, and sometimes, based on its nature, it is also known by metaphorical names like Rost, Ushshoq, Buzruk, Navo, etc. The same applies to rhythmic modes, which emerge from the interaction of basic beats (ruks, juz, or far') and patterns.

The twelve most advanced circles of melody, which include pure bo'ds (like zulraba'-kvarta, zulhams-kvinta, and zulkull-octave), are separated into a special superior genre, known as "mashhur jam'lar" ("famous collections"), which later became known as "maqomat." Since then, referring to the "ilm al-adwar" as the "twelve maqoms" has become customary among musicians. Today, European scholars also refer to this theory as "maqom theory" or "maqom principle." Interestingly, Western musicologists now see the maqom theory not only as a theoretical framework but also as a potential method for practical creative expression.

The science of circles begins with rationally conceived numerical sciences, such as Safiuddin Abdulmo'min Urmavi (1216–1294), who, being a highly skilled theorist and a master in music, aruz (poetic meter), and astronomy, worked on the theoretical foundations of this science. His work became a common scientific and practical teaching, which elevated musicological practice. During the golden age of the adwar doctrine, the outstanding musicologist Abdulqodir Marog'iy (1354–1435) was instrumental in advancing this doctrine. His work, alongside others, contributed significantly to the music of the Timurid era, enriching the scientific understanding of music.

This process holds particular significance for us, as it coincided with a time when scientific and artistic development reached its peak in the Timurid capitals of Samarkand and Herat. As noted by Fitrat, "Under the protection of Husayn Bayqarah and Alisher Navoi, the golden age of Chagatai literature and music began." Marog'iy's contributions to this development, especially in music theory, are particularly notable.

The classical music system that later took root in Central Asia draws its core principles from this "golden era." Thus, we can confidently assert that there is a direct succession between the "ilm al-adwar" from Navoi's time and the present-day maqom traditions.

In conclusion, the introduction of Shashmaqom principles into practice marked the beginning of a new era in Central Asian music theory. The theory of circles gave rise to its own unique theoretical and metaphorical framework, which was later applied in the works of figures like Safiuddin Urmavi, Abdulqodir Marog'iy, and Abdurahmon Jomiy. With the emergence of Shashmaqom, practical knowledge became predominant, leading to the full development of the maqom system that is still in practice today.

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TINCH OKEANINING BIOLOGIK DUNYOSI

Annotatsiya: *Tinch okeani dunyosining eng katta suv havzasi bo'lib, uning biologik dunyosi o'zining betakror xilma-xilligi bilan ajralib turadi. Ushbu maqolada Tinch okeani o'simlik va hayvonot dunyosining o'ziga xosligi yoritilgan. Fitoplankton va dengiz suv o'tlaridan tortib, tropik marjon riflari va qutbiy hududlarning o'ziga xos ekotizmlari haqida ma'lumot berilgan. Shuningdek, baliqlar va chuqur suv osti jonzotlari kabi biologik turlar tahlil qilingan. Maqola Tinch okeanining ekologik ahamiyati, uning iqlimiga ta'siri va zamonaviy ekologik muommolarni ham qamrab oladi. Ushbu ish biologik xilma - xillikni saqlash va okean ekotizmlarini himoya qilishni ta'kidlaydi. Maqola nafaqat ilmiy ma'lumotlarga asoslangan, balki tabiiy boyliklarimizni asrashga undaydi.*

Kalit so'zlar: *Fitoplankton, baliq turlari, marjonlar, mikroorganizmlar, dengiz toshbaqalari, ekologik muvozanat.*

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BIOLOGICAL WORLD OF THE PACIFIC OCEAN

Annotation: *the largest body of water in the Pacific world, its biological world is characterized by its unique diversity. This article covers the identity of the Pacific flora and fauna. From phytoplankton and seaweed to tropical coral reefs and the characteristic ecoticism of polar regions has been documented. Biological species such as fish and deep-water amphibians have also been analyzed. The article also covers the environmental significance of the Pacific Ocean, its impact on its climate, and modern environmental treatment. This work emphasizes biodiversity conservation and the protection of oceanic ecoticism. The article is not only based on scientific data, but also encourages us to preserve our natural resources.*

Keywords: *phytoplankton, fish species, corals, microorganisms, sea turtles, ecological balance.*

Tinch okeani - dunyodagi eng katta va chuqur okean bo'lib, Yerdagi barcha suv havzalarining deyarli yarmini egallaydi. Bu ulkan suv havzasi o'zining ajoyib biologik xilma - xilligi bilan ajralib turadi. Tinch okeanining biologik dunyosi yer yuzidagi eng boy va murakkab ekotizmlardan biri hisoblanadi. Bu okean nafaqat ulkan geografik maydonga egaligi bilan boshqa suv havzalaridan farqlanadi. Tinch okeanidagi organizmlar moslashuvchanligi, yashash sharoitlari va biologik ahamiyati bilan diqqatga sazovor hisoblanadi.

Okeanning geografik xususiyatlari va iqlimi. Tinch okeani shimoldan janubga qariyb 15 ming kilometr masofaga cho'zilgan bo'lib, 180 million kvadrat kilometr maydonni qamrab oladi. Tinch okeanining iqlimlaridan masalan, *Tropik* mintaqa kengliklarida quruq va nam mavsumlar fasllarga qarab almashinadi. Dengiz sathining harorati doimiy ravishda yuqori bo'lib, bu hududda bug'lanish jarayonlari tez sodir bo'ladi**.** *Subtropik* va *mo'tadil* mintaqalarda iqlim nisbatan sovuqroq va namroq bo'lib, qish va yoz fasllari sezilarli ravishda farqlanadi. Okeanning sharqiy qismida sovuq omillar, masalan, Kaliforniya va Peru oqimlari iqlimga ta'sir qiladi. *Qutbiy* mintaqasi shimoliy muz okeaniga yaqin hududlar sovuq va muz bilan qoplangan. Janubiy yarimsharning qutbiy mintaqalari ham Antarktida ta'sirida qattiq sovuq iqlimga ega hisoblanadi. Bu esa turli xil flora va fauna turlarining yashashi uchun qulay sharoit yaratadi.

Biologik xilma-xillik. Tinch okeanining biologik xilma-xilligi millionlab organizmlar-mikroorganizmlardan tortib kitlargacha-turli ekotizmlarni qamrab oladi. Quyida uning asosiy biologik xususiyatlariga to'xtalamiz:

1. Suv o'simliklari va fitoplanktonlar. Fitoplanktonlar-okeanning oziq-ovqat zanjirining asosiy qismi. Ular fotosintez orqali kislorod ishlab chiqaradi va okean hayvonlari uchun asosiy oziq manbai hisoblanadi. Dengiz suv o'simliklari, masalan, dengiz o'tlarining turli xil turlari ham Tinch okeanida keng tarqalgan.

2. Baliqlar va boshqa dengiz hayvonlari. Tinch okeanida baliqlarning minglab turlari yashaydi. Salomon, orkinos, makrel kabi tijorat baliqlari muhim iqtisodiy ahamiyatga ega. Shuningdek, ahtapotlar, kalmarlar va kirill kabi umurtqasiz hayvonlar ham juda ko'p.

3. Sutemizuvchilar. Tinch okeani katta va kichik kitlar, delfinlar, dengiz sherlari, dengiz buqasi kabi sutemizuvchilarga boy. Ular okeanning muhim ekologik muvozanatini ta'minlashda asosiy rol o'ynaydi.

4. Marjon riflari. Tinch okeanining tropik hududlarida joylashgan bo'lib, ular dunyodagi eng boy ekotizmlardan biridir. Ular okean hayoti uchun muhim ahamiyatga ega bo'lib , sayyoramizning iqlimini boshqarishda ham katta rol o'ynaydi. Marjon riflaridan eng mashhurlari Buyuk to'siq rifi Avstraliya sohillari yaqinida joylashgan. Bu dunyodagi eng katta marjon rifi bo'lib, uzunligi 2300 kilometrdan oshadi. Ikkinchisi kichik Tinch okean riflari: Fiji, Samoa, Tongo va Fransiya Polineziyasi kabi hududlarda topilgan kichik, ammo biologik xilma -xil riflardir.

5. Qutbiy hududlar ekotizimi. Okeanning shimoliy va janubiy qutbiy hududlarida qalin muz qatlamlari ostida planktonlar, qutb baliqlari, tyulenlar va pingvinlar yashaydi.

6. Dengiz suv o'tlari. Okeanning qirg'oqbo'yi hududlarida dengiz suv o'tlari masalan, Zostera va Posidoniya kabi o'simliklar keng tarqalgan. Ular baliqlar va boshqa dengiz jonzotlari uchun yashash va ko'payish muhitini ta'minlaydi.

7. Chuqurliklardagi suv hayvonlari. Tinch okeaning chuqur suv qatlamlarda moslashgan g'aroyib jonzotlar masalan, angler baliqlar, biolumineskent meduzalar va boshqa o'ziga xos organizmlar yashaydi. Bu jonzotlar qorong'ulikda yashashga moslashgan bo'lib, maxsus yorug'lik chiqarish xususiyatiga ega.

Bulardan, masalan, Pelikan baliq yorug'lik manbasi hisoblanadi. Ular og'zidagi va qorin sohasidagi yorug'lik chiqaruvchi organlarga ega. Foydasi ovini jalb qilishda yordam beradi. 1200-3000 metr chuqurlikda yashaydi. Ikkinchisi Viperfish baliq uning yon tomonlarida va qorinida biolyuminessent organlar joylashgan. Foydasi esa yirtqichlarni chalg'itishda va ov qilish uchun ishlatadi. 200-5000 metr chuqurlikda joylashgan hisoblanadi.

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TABIATNING IKKI ASOSIY KUCHI. ENDOGEN VA EKZOGEN JARAYONLAR

Annotatsiya. *Maqola yer po'stining shakllanishi va rivojlanishida ishtirok etuvchi endogen va ekzogen jarayonlarni har tomonlama tahlil qilishga bag'ishlangan. Endogen jarayonlar ya'ni vulqonizm, yer silkinishlari va tog' hosil bo'lish bosqichlari kabi yerning ichki geodinamik harakatlari natijasida yerning ichki energiyasi ta'sirida yuzaga keladi. Ekzogen jarayonlar esa tashqi omillar ya'ni shamol, suv, muzliklar, kimyoviy, fizikaviy va biologik faoliyatlar orqali yer yuzasini o'zgartiradi.*

Kalit so'zlar. *Landshaftning o'zgarishi, tabiiy jarayonlar, eroziya, magmatizm, tektonik jarayonlar, vulqonizm, kimyoviy nurash.*

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THE TWO MAIN FORCES OF NATURE. ENDOGENOUS AND EXOGENEOUS PROCESSES

Abstract. *The article is devoted to a comprehensive analysis of endogenous and exogenous processes involved in the formation and development of the earth's crust. Endogenous processes, i.e., volcanism, earthquakes, and mountain formation, occur under the influence of the earth's internal energy as a result of internal geodynamic movements of the earth. Exogenous processes, on the other hand, change the earth's surface through external factors, i.e., wind, water, glaciers, chemical, physical, and biological activities.*

Keywords. *Landscape change, natural processes, erosion, magmatism, tectonic processes, volcanism, chemical weathering.*

Barchamizga ma'lumki, Yer sayyorasi dinamik tizim hisoblanib, uning yuzasi doimiy ravishda o'zgarishda bo'ladi. Bu o'zgarishlar asosan ikki turdagi jarayonlarning ishi natijasida ya’ni endogen va ekzogen jarayonlar ta’sirida sodir bo’ladi. Yer yuzasining quruqlik va suvlik muhitida turli tuman relyef shakllarining hosil bo’lishida katta rol o’ynaydi. Hozir biz bu jarayonlarni yanada chuqurrroq o’rganib chiqamiz.

Endogen jarayonlar yerning ichki energiyasi ta’sirida yuzaga keladi. Ushbu jarayonlar yer po’stining ichki qismida sodir bo’lib, tog’larning paydo bo’lishi, yer silkinishlari, vulqonik jarayonlar va tepaliklarning ko’tarilishlari haqidagi faoliyatni o’z ichiga oladi.

Endogen jarayonlarining asosiy turlari.

1.Tektonik harakatlar. Yerning ichki qismlarida hosil bo’ladigan bosim va harorat ta’sirida yer pustida yoriqlar, tog’lar va cho’kindi havzalar shakllanadi.

2.Vulqonizm. Magma yer yuzasiga chiqib, vulqonlarning paydo bo’lishiga olib keladi. Bu jarayon natijasida yangi tog’ jinslari hisoblangan bazaltli, granitli, cho’kindili qatlamlar hosil bo’ladi.

3.Yer silkinishi. Yer ichki qismlarida sodir bo’ladigan energiya ajralishi natijasida yuzga keladi. Yer silkinishi tektonik yoriqlar va vulqonizm bilan bog’liq bo’lishi mumkin.

4.Magmatizm. Magmaning yer ichida harakatlanishi va sovib qotishi natijasida magmatik jinslar hosil bo’ladi.

Ekzogen jarayonlar. Ekzogen jarayonlar Quyosh energiyasi, atmosfera, suv va shamol kabi tashqi omillar ta’sirida sodir bo’ladi. Ushbu jarayonlar yerning yuzasini yemiradi va o’zgartiradi hamda mineral jinslarni suv va shamolning ishi natijasida bir joydan boshqa joyga ko’chiradi.

Ekzogen jarayonlarning asosiy turlari.

1. Eroziya. Daryo, shamol yoki muzliklar tomonidan tog’ jinslarining yemirilishi va mineral jinslarning boshqa joyga ko’chirilishi hisoblanadi.

2. Denudatsiya. Tog' jinslari va relyef shakllarining asta-sekin vaqt o'tishi bilan tekislanishi hisoblanadi.

3. Cho'kindi jarayonlar. Tashilgan mineral jinslarning dengiz, daryo yoki ko'l tubiga cho'kishi natijasida cho'kindi jinslar hosil bo'ladi.

4.Nurash. Tog' jinslarining kimyoviy, fizik yoki biologik ta'siri natijasida yemirilishi hisoblanadi.

5.Abrasion. Dengiz to'lqinlari yoki shamol ta'sirida qirg'oq va mineral jinslarning yemirilishi sodir bo'ladi.

Endogen va Ekzogen jarayonlarning o'zaro ta'siri.

Endogen jarayonlar yer yuzasida yangi relyef shakllarini yaratadi. Masalan tog'lar, qirlar, tepaliklar, vulqonlar va yoriqlarni hamda boshqa relief shakllarini paydo qiladi. Ekzogen jarayonlar esa endogen jarayonlar hosil qilgan shakllarini yemiradi. Masalan tog'lar, qirlar vaqt o'tgan sayin shamol, va suvning ta'sirida pasayib tekislikka aylanib ketadi. Misol uchun shamol jinslarni bir joydan ikkinchi joyga uchirib olib ketadi. Xulosa qilib aytganda yerning relyefi endogen va ekzogen jarayonlarning o'zaro munosabati natijasida shakllanadi. Bittasi relyefni shakllantiradi. Ikkinchisi esa hosil bo'lgan relyef shakllarini tekislaydi. Shuning uchun ham yer yuzasining o'zgarishi doimiy jarayon hisoblanadi.

Endogen va ekzogen jarayonlarga biron hududni misol qilsak.
Toshkent viloyatining Ohangaron vodiysi.

Ohangaron vodiysi seysmik jihatidan faol bo'lgan hududlardan biri hisoblanadi. Bu yerda endogen jarayonlardan biri hisoblangan Yerning ichki energiyasi ta'sirida shakllangan tog' jinslarining harakatlari ko'p uchraydi. Masalan tektonik harakatlar Ohangaron vodiysi Pomir va Tyanshan tog' sistemasiga juda yaqin joylashganligi sababli bu yerda yoriqlar, ko'tarilishlar, tog' hosil bo'lishlari tez tez kuzatilib turadi. Vulqon jarayonlariga, Ohangaron vodiysi qadimgi geologik davrlarda bu hududda vulqonlarning faoligi ko'p marotaba kuzatilgan hisoblanadi. Shu sababli bu yerda vulqon jinslari va tog'lar shakllangan.

Ohangaron vodiysida ekzogen jarayonlardan daryo eroziyasi ko'p kuzatiladi. Ohangoron vodiysining relyefini shakllantiruvchi asosiy omillardan biri hisoblanadi. Daryo oqimi Ohangaron vodiysidagi tog' jinslarini eroziya qilib vodiyni kengaytiradi va chuqurlashtiradi. Sel va yer ko'chkilari hodisasi tog'li hududlarda kuchli yomg'ir yog'ishi natijasida sel oqimlari va yer ko'chkilari sodir bo'lib turadi. Bu jarayonlar vodiyning relyefini shakllantiradi. Vodiyning kengayishiga olib keladi ba'zi joylarga esa ma'naviy va iqtisodiy zarar keltiradi.

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O'ZBEKISTON OILALARINING TARKIBI

Annatatasiya: *Maqolada O'zbekiston Respublikasidagi oilalardagi so'nggi yillarda bo'lib, o'tgan tarkibiy o'zgarishlar va ularning jamiyat hayoti uchun ta'siri yoritilgan.*

Kalit so'zlar: *Oila, farzand,jamiyat, ijtimoiy-iqtisodiy omil.*

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COMPOSITION OF FAMILIES IN UZBEKISTAN

Abstract: *The article discusses the structural changes that have occurred in families in the Republic of Uzbekistan in recent years and their impact on the life of society.*

Keywords: *Family, child, society, socio-economic factor.*

Oilalar jamiyat davomiyligini ta'minlovchi asosiy yacheyka hisoblanadi. Bu yerda, inson dunyoga kelib yashaydi va balog'ot yoshiga yetib, farzand ko'radi hamda nasl qoldiradi. Bu uzviy jarayon tufayli jamiyatda avlodlar almashinib yangidan yangi oilalar barpo bo'ladi. Oilalar jamiyatning davomiyligini, aholi sonini o'sib borishini ta'minlovchi jarayondir. Lekin, u bevosita ijtimoiy-iqtisodiy muhit bilan bog'liq holda o'zgarib turadi. Ammo shu yerda bir narsani ham unutmaslik kerakki ijtimoiy-iqtisodiy taraqqiyotning cho'qqisiga yetgan Yevropa, Amerika, Osiyodagi ayrim davlatlarda oilalar inqirozning boshi berk ko'chasiga kirib qolganiga guvoh bo'lmoqdamiz.

Hozirgi davrga kelib aholi oilalarning me'yorda ko'payishi uchun har bir oiladagi farzandlarning o'rtacha soni 2,5 tadan kamdir. Ilmiy manbalarda har bir oila o'rtacha 2 tadan farzand ko'rsa o'z ota onalari o'rnini to'ldiradilar. Agar oilada 3 tadan farzand bo'lsa, uchinchi bola turli sabablar (baxtsiz hodisalar, kasalliklar) bilan hayotdan ko'z yumgan bolalar va farzandsiz oilalarni "qoplaydi", ya'ni o'rnini bosadi. Shuning uchun ham aholi sonini bir me'yorda saqlanishi uchun oiladagi farzandlar soni o'rtacha 2,5 bolani (demak oilalarning yarmi 2 bolali yarmi esa 3 bolali) tashkil etishi lozimdir. Agar oilada farzandlar soni 2,5 kamayib borsa aholi soni kamayadi va demografik inqiroz sodir bo'ladi. Oiladagi farzandlar soni tug’ilishning yig’indi koeffetsinti (har bir 15 – 49 yoshdagi ayolga to’g’ri kelgan bolalar soni) yordamida aniqroq ifodalanadi.

Aholining tabiiy harakati qator omillar ta’sirida sodir bo’ladi. Ushbu omillar shartli uch guruhga ajratiladi.

Ijtimoiy-iqtisodiy omillar: ishlab chiqarish munosabatlarining xususiyatlari, ishlab chiqaruvchi kuchlarning rivojlanishi, aholining turmush tarzi, ma’lumotlilik va madaniyat darajasi, ayolllarning ijtimoiy hayotda tutgan o’rni, bandligi, dini, urf odat va qadriyatlar.

Tabiiy-biologik omillar: tabiiy sharoit, tabiiy ofatlar, erkak va ayol organizmining tashqi muhitga moslashish darajasi, iqlim va uning jinsiy yutuklikka, farzand ko’rish davriga, turli epidemiya va kasalliklarga ta’siri.

Demografik omillar: aholining yosh jinsiy tarkibi, nikoh va ajralish jarayonlari. Agar aholi tarkibida yoshlar salmog’i yuqori va jinsiy mutanosiblik bo’lsa, nikohga kirish, ya’ni oilalar paydo bo’lishi uchun demografik imkoniyat mavjuddir. Bu hol o’z navbatida tug’ilishga ijobiy ta’sir etadi. Aksincha, aholi tarkibida qariyalar salmog’i yuqori bo’lsa, tug’ilish kamayib, o’lim hollari ko’payadi. Demak har bir davlat mana shu mutanosiblikni saqlab turushga intiladi. Yevropa davlatlarida ham aholi o’rtasida yoshlar salmog’ini saqlab qolishga oid bir qancha harakatlar bo’lgan. Ammo ular tomonidan reproduktiv yoshdagilarni moddiy, iqtisodiy, moliyaviy jihatdan qo’llab-quvvatlashga qaratilgan say-harakatlar o’zining ijobiy natijalarini bermagani uchun ularda qariyalar soni umumiy aholi ichida katta ko’rsatkichga ega bo’lib, qolmoqda.

Aholining takror barpo bo’lishi, ya’ni avlodlar almashinish jarayoni jamiyat taraqqiyotining turli bosqichlarida, davlatlarda, millatlarda o’ziga xos xususiyatga egadir. Ana shu xususiyatlarni aniq bilish uchun aholining takror barpo bo’lishini ifodalovchi maxsus ko’rsatkichlar ya’ni koeffisentlardan foydalaniladi.

Demografik o’sishning asosiy manbai an’anaviy ravishda aholining tabiiy harakati hisoblanadi. Shuni alohida ta’kidlash joizki, mamlakatda ham, o’rganilayotgan mintaqada ham tug’ilishning asosiy ko’rsatkichlarida shuni bilish mumkinki tabiiy o’sishning pasayish tendensiyasi kuzatilmoqda. Biroq, ushbu tendensiya mamlakatning boshqa mintaqalariga qaraganda kamroq seziladi. Tug’ilish va tabiiy o’sish sur’atlarini pasayish jarayoni Toshkent shahrida allaqachon boshlandi. Asta-sekin va qo’shni mintaqalarda davom etmoqda hamda janubda – Surxondaryo va Qashqadaryo viloyatlarida eng past ko’rsatkichlarga erishilmoqda. Boshqacha aytganda, ushbu jarayon butun mamlakat aholisining o’sishiga hissa qo’shayotgan ushbu sohalarda yakunlanadi.

O‘zbekiston aholisi asosan tabiiy ko‘payish hisobiga o‘sib kelgan. So’nggi yillarda tabiiy ko‘payish sur’atining yil sayin kamayib borishiga qaramasdan, u nafaqat aholi sonining o‘sishni, balki oilalarning ko‘payishini ham ta’minlamoqda. Tadqiq qilinayotgan davr mobaynida O‘zbekistonda tashqi migratsiya oqibatlari salbiy bo‘lib, buning natijasida aholi sonining o‘sishi uning tabiiy ko‘payishi ko‘rsatkichidan kam bo‘lishini ta’minlagan O‘zbekiston Respublikasi doimiy aholisi soni 2020 yil 1 yanvar holatiga 33905,8 ming kishini tashkil etib, 2019 yilda 650,3 ming kishiga yoki 2,0 %ga o‘sgan. Jumladan, shahar aholisi soni 17,1 mln kishini (jami aholi sonidagi ulushi 50,5 %), qishloq aholisi soni 16,7 mln kishini (49,5 %) tashkil etdi. Respublika hududlari kesimida tahlillar shuni koʻrsatmoqdaki, 2020 yil 1 yanvar holatiga eng koʻp aholi soni Samarqand viloyatida 3719,6 ming kishini (respublika aholisi sonidagi ulushi 11,4 %ni) tashkil etib, keyingi oʻrinlarda Fargʻona viloyatida 3620,1 ming kishini (11,1%), Qashqadaryo viloyatida 3148,1 ming kishini (9,7%), Andijon viloyatida 3011,6 ming kishini (9,2%) tashkil etdi.

Qashqadaryo viloyati juda yuqori demografik imkoniyatlarga ega. Bundan tashqari, aholi soni respublikada eng yuqori sur'atlarda o'smoqda. Mustaqillik yillarida (1991–2020) viloyat aholisi soni 1694,0 mingdan 3225,7 ming kishiga yoki 174,7% ga ko'payganligini ta'kidlash kifoya. O'zbekistonda esa bu ko'rsatkich o'rtacha 150,5 ni tashkil etdi (o'rtacha yillik o'sish sur'atlari mos ravishda 2,70% va 1,95%).

Aholi tugʻilish koʻrsatkichi mamlakatning barcha viloyatlarida qisqarib borayotganligi kuzatilsada, mazkur jarayon boʻyicha ular bir biridan keskin farq qiladi. Bu jarayon 1991 yilda Surxondaryo, Qashqadaryo viloyatlarida 40 promilledan yuqori, Andijon, Jizzax, Namangan, Samarqand, Sirdaryo, Xorazm va Qoraqalpogʻiston Respublikasida 35-40 promille, Buxoro, Navoiy, Fargʻona viloyatlarida 30-35 promillega teng boʻlgan. Bu koʻrsatkich Toshkent viloyati va Toshkent shahrida pastroq boʻlgan. Aholi tugʻilish darajasi yil sayin kamayib, 2019 yili barcha viloyatlarda 21-25 promilleni tashkil etdi va ular oʻrtasidagi farqlar qisqargan.

Respublikamizda oʻtgan asrning 70-yillarida oilalarda tugʻilishining pasayishi kuzatilib, u obyektiv va subyektiv sabablarga bogʻliqholda amalga oshgan. Tahlillar ushbu jarayonlarni davr siyosati ya'ni markaz tomonidan Oʻrta Osiyoda amalga oshirilgan demografik siyosat aniqrogʻi oilalarning kattaligini, bolalar sonini majburiy chegaralash natijasi ekanligidan dalolat bermoqda. Ushbu siyosatning ta'siri Qashqadaryo viloyatida oʻtgan asrning oxirgi choragidan namoyon boʻla boshlasada, aholi orasida demografik rivojlanishida darhol sezila boshlamadi. Respublikamizda oilalar demografik rivojlanishi, shuningdek, ijtimoiy-iqtisodiy rivojlanish darajasining mintaqaviy xususiyatlari aholi soni oʻsishida hududiy tafovutlarni vujudga keltirdi.

Oʻzbekistonda 1989-2019 yillar mobaynida oilalarning oʻsish sur'ati juda yuqori boʻlgan. Bu esa mazkur davrda oilalar tabiiy koʻpayishining yuqori boʻlishi va tashqi migratsiyaning ijobiy natijasi bilan ifodalanadi. Ushbu davrda Jizzax, Surxondaryo, Qashqadaryo, Xorazm va Namangan viloyatlarida hamda Qoraqalpogʻiston Respublikasida oilalar demografik taraqqiyotida jadal oʻsish roʻy berdi.

Oxirgi yillarda respublikada oilalar sonining oʻsishi oldingi davrga nisbatan kamayib, u tugʻilishning kamayishi va tashqi migratsiyaning salbiylashuvida namoyon boʻluvchi demografik oʻtish jarayonining boshlanganligi bilan tavsiflanadi. Mazkur davrda ham Jizzax, Surxondaryo, Qashqadaryo, Xorazm va Namangan viloyatlarida oilalarning oʻsishi biroz yuqori boʻlgan. Bu jihatdan Qoraqalpogʻiston va boshqa mintaqalar oʻrtacha koʻrsatkichga ega boʻldi. Toshkent va Sirdaryo viloyatlarida oilalar soni sekinlik bilan o‘sgan bo‘lsa, Toshkent shahrida uning soni deyarli o‘zgarmagan.

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RAQAMLI TRANSFORMATSION SHAROITDA MAHALLIY BUDJET DAROMADLARINI KENGAYTIRISH METODLARI VA ULARNI QO'LLASH XUSUSIYATLARI

Annotatsiya:*Ushbu maqola raqamli transformatsion sharoitda mahalliy budjet daromadlarini kengaytirishning samarali metodlari va ularni qo'llash xususiyatlarini tahlil qiladi. Raqamli texnologiyalar va innovatsion vositalar yordamida mahalliy byudjetlar daromadlarini oshirish bo'yicha yangi imkoniyatlar yaratilmoqda. Mahalliy boshqaruv tizimlarining raqamli transformatsiya jarayoni orqali soliq yig'imlari, harajatlar monitoringi, va ijtimoiy dasturlarni boshqarish samaradorligi oshadi. Shuningdek, bu jarayonlarda raqamli infratuzilma va platformalarning ahamiyati ko'rsatiladi. Maqolada, raqamli texnologiyalarning mahalliy daromadlarni kengaytirishdagi o'rni va bu metodlarning ijtimoiy, iqtisodiy va huquqiy jihatlari ham ko'rib chiqiladi.*

Kalit so'zlar: *raqamli transformatsiya, mahalliy budjet, daromadlar, soliq yig'imi, boshqaruv tizimi, raqamli infratuzilma, innovatsion metodlar, ijtimoiy dasturlar, iqtisodiy samaradorlik, monitoring.*

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METHODS OF EXPANDING LOCAL BUDGET REVENUES IN THE CONTEXT OF DIGITAL TRANSFORMATION AND FEATURES OF THEIR APPLICATION

Annotation:*This article analyzes effective methods for expanding local budget revenues in the context of digital transformation and the characteristics of their application. New opportunities are being created to increase local budget revenues through digital technologies and innovative tools. The digital transformation of local governance systems enhances the efficiency of tax collection, expenditure monitoring, and management of social programs. Furthermore, the importance of digital infrastructure and platforms in these processes is highlighted. The article also examines the role of digital technologies in expanding local revenues, as well as the social, economic, and legal aspects of these methods.*

Keywords: *digital transformation, local budget, revenues, tax collection, governance system, digital infrastructure, innovative methods, social programs, economic efficiency, monitoring.*

Mahalliy budjet daromadlaridan samarali foydalanishni ta’minlash muammolarini, ulardan foydalanishning hozirgi holati, bu yo‘nalishda mavjud bo‘lgan muammolar va ulardan kelib chiqish sabablarini chuqur va atroflicha tahlil qilmasdan hal qilib bo‘lmaydi. Bu maqsadga erishish uchun tahlillarimiz jarayonida biz hududlar kesimida ma’lumotlaridan imkon doirasida foydalanishga xarakat qilamiz. Bizning fikrimizcha, bu muammoni tadqiqotning markaziy bobi hisoblangan 2-bob doirasida daromad turlari kesimida ko‘rib chiqish maqsadga muvofiqdir.

Mahalliy budjet daromadlarini to‘ldirishda mahalliy soliqlar bevosita mahalliy darajada faoliyat yurituvchi korxonalar faoliyati bilan bog‘liq. Ushbu korxonalar ishlab chiqarishning turli bosqichlarida ishtirok etib, hududlar milliy daromadlarini tashkil etish va taqsimlashda qatnashadi. Shu jihatdan kelib chiqib, mahalliy budjet daromadlarini davlat tomonidan tartibga solish muhim ahamiyat kasb etadi.

Mamlakatimiz rahbari 2020 yil 24 yanvardagi Parlamentga Murojaatnomasi doirasida asosiy vazifalar sifatida makroiqtisodiy barqarorlikni ta’minlash, inflyatsiyani nazorat qilish, tarmoq korxonalarini xususiylashtirish, davlat tomonidan narxlar belgilanishini tartibga solishni bekor qilish va «yashirin iqtisodiyot»ga barham berish, budjet mablag‘laridan maqsadli va oqilona sarflanishini nazorat qilishni kuchaytirish kabi vazifalarni belgilab berdilar.

Mamlakatimizda institutsional islohotlar amalga oshirilayotgan bir sharoitda ijtimoiy hayotimizning sohalarida bo‘lgani kabi davlat budjetini boshqarishda ham ko‘plab o‘zgarishlarni amalga oshirish hozirgi kunning asosiy talablaridan biri hisoblanadi.

Mamlakatimizda budjet tizimini yanada isloh qilish, davlat budjetini xalqaro andozalarga muvofiq keladigan tarzda rivojlantirish, budjet istiqbolini belgilashning yangi mexanizmlaridan foydalanish zaruriyati paydo bo‘lmoqda. Bu esa O‘zbekiston Respublikasida mahalliy budjet daromadlarini istiqbolini belgilashni takomillashtirishni talab etadi.

Umuman olganda, so‘nggi yillarda mahalliy budjet ko‘rsatkichlari belgilanganidan ham yuqori darajada amalga oshirilishi, defitsitga emas profitsitga erishib kelinmoqda. Iqtisodiyotning davlat sektorini boshqarish borasidagi islohotlar bir qator yo‘nalishlarni qamrab oladi:

boshqaruv sohasidagi islohotlar;

budjet munosabatlarini rivojlantirish va tartibga solish, shu jumladan, budjetlararo munosabatlarni takomillashtirish;

budjet jarayonini isloh etish; budjet sohasini qaytadan tashkil etish va boshqalar.

Iqtisodiyotda samarali va ijtimoiy yo‘naltirilgan iqtisodiy o‘sish surxatlarini ta’minlash va YaIMni oshirish bo‘yicha barcha sohalarda aniq, puxta va to‘g‘ri moliyaviy siyosat shakllantirishni dolzarb vazifa etib qo‘ymoqda.

Bunda amalga oshirilayotgan qisqa muddatli moliyaviy rejalar siyosatini keng qamrovli tahlil etish va natijalar hisobini yuritish imkoniyatlari cheklanadi.

Shu nuqtai nazardan o‘rta muddatli moliyaviy rejalashtirish va prognozlashtirishning (uch yil muddatga) amaliy ahamiyati yanada oshadi.

Ko‘plab davlatlar budjet jarayonida tadbiq etilayotgan hamda davlatning makroiqtisodiy va tuzilmaviy siyosati masalalarini nazarda tutuvchi ko‘p yillik budjetlashtirishning asosiy jihatlarini umumlashtirgan holda quyidagi xulosalarni olishimiz mumkin:

- eng muhim zaruriyatlar bilan bog‘liq istiqbolli maqsadlarni balanslashtiradigan, hozirgi kundagi hamda kelgusi avlodlar manfaatlarini hisobga oluvchi budjet tuzishning funktsional modeli amal qiladi;
- bozor sharoitida faoliyat yuritayotgan xo‘jalik yurituvchi sub’ektlar uchun budjet cheklovlari tizimiga o‘tiladi, bunda budjet va uning alohida moddalari xajmi davlat vakolatli organlari tomonidan mablag‘larga so‘ralagan extiyojlaridan kelib chiqib emas, balki o‘rnatilgan limitlardan kelib chiqib aniqlanadi;
- vazirliklar tashabbusi bilan qilinadigan xarajatlar ularning resurslar bilan ta’minlanganligi sharoitidagina qabul qilinadi;
- budjetni tuzishda butun e’tibor budjet mablag‘larini xarjlash orqali erishish lozim bo‘lgan uzil-kesil natijalarga qaratiladi;
- o‘ta muhim va alohida ahamiyatga ega xarajatlar resurslarni qayta taqsimlash hisobiga moliyalashtiriladi, qo‘shimcha moliyalashtirishga esa ushbu xarajatning umumjamiyat oldidagi natijasi uni oluvchilar va millat-davlat manfaatlariga mos kelishini isbotlab berilgan taqdirdagina yo‘l qo‘yiladi;

Bu, avallambor, qisqa muddatli budjetni rejalashtirish va prognozlashtirish sharoitidagi budjet xizmatlarini sifatini oshirishdagi qiyinchiliklarni bartaraf etish, shuningdek, budjet-soliq siyosatida amalga oshirilayotgan chora-tadbirlar, xususan asosiy makroiqtisodiy ko‘rsatkichlar (avvalambor, korxonalar moliyaviy resurslari, aholi daromadlari, to‘lov balansining shakllanishi va ishlatilishi ko‘rsatkichlari) borasida yanada to‘liq va aniq hisob-kitoblarni yuritish zaruriyati paydo bo‘lishida namoyon bo‘ladi.

Bir vaqtning o‘zida mahalliy budjetlarning daromadlari manbalarini shakllantirish ko‘p omilli jarayon bo‘lib, ularning tarkibida soliqli daromadlar muhim ahamiyat kasb etadi. Soliqli daromadlar soliq ma’muriyatchiligi, mahalliy budjetlar daromadlar bazalarini tartibga soluvchi me’yoriy-huquqiy hujjatlar hamda siyosiy omillarning ta’siri hisobga olingan holda tashkil etilishi ko‘zda tutilgan.

Aytish joizki, hududlarning alohida xususiyatlari hisobga olingan holda mahalliy budjetlar tarkibiy tuzilishi o‘rtasida taqsimoti belgilab qo‘yilgan (2.1.1-jadval).

O‘zbekistonda erkin tadbirkorlikning yanada rivojlanib borayotganligi, mahalliy budjetlar daromadlar ahamiyatini yanada oshiradi. Chunki, ishbilarmonlik sohasidagi daromadlarga cheklovlarning barham topilishi bilan topilayotgan daromadlarning turlari ham ko‘payib bormoqda, shu bilan birga yuqori daromad oladigan mahalliy budjetlar daromadlari barqarorligi asta-sekin ko‘payib bormoqda.

2.1.1-jadval

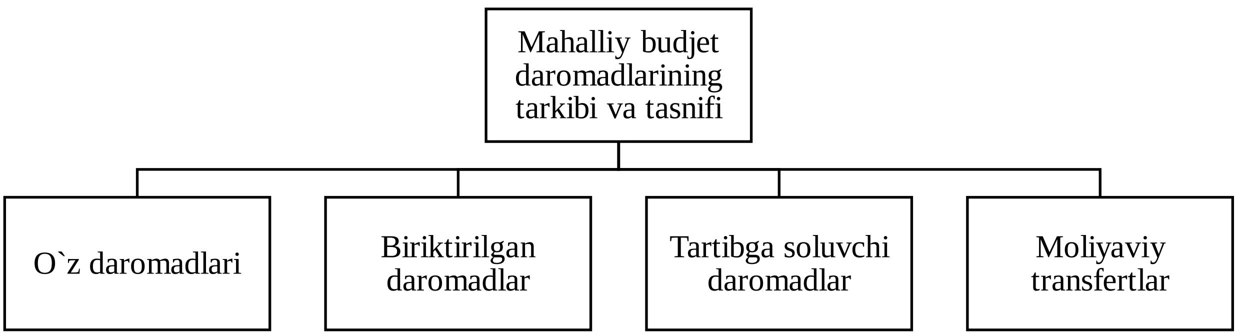
Mahalliy budjetlar daromad manbalari taqsimoti[52]

Tumanlar mahalliy budjetlari	Qozaqalpog'iston respublikasi, viloyatlar va Toshkent shahrar mahalliy budjetlari
1. Jismoniy shaxslardan olinadigan mol-mulk solig'i	1. Yuridik shaxslardan olinadigan mol-mulk solig'i 2. Yuridik shaxslardan olinadigan yer solig'i
2. Jismoniy shaxslardan olinadigan yer solig'i	3. Elektr stantsiyalari tomonidan to'lanadigan suv resurslaridan foydalanganlik uchun soliq
3. Jismoniy shaxslar mol-mulkini ijaraga berishdan to'lanadigan hamda yakka tartibdagi tadbirkorlar tomonidan to'lanadigan daromad solig'i	4. Yakuniy iste'molchilarga benzin, dizel yoqilg'isi va gaz realizatsiya qilishdagi aktsiz solig'i 5. Aylanmadan soliq 6. Bojxona bojlari 7. Davlat byudjetiga undiriladigan jarimalar
4. Suv resurslaridan foydalanganlik uchun soliq, bundan elektr stantsiyalari tomonidan to'lanadigani mustasno.	8. Avtotransport vositalarini xarid qilganlik uchun ularni ichki ishlar organlarida ro'yxatdan o'tkazishda avtotransport egalari (foydalanuvchilar) tomonidan to'lanadigan yig'imlar
5. Qurilish materiallari bo'yicha yer qa'ridan foydalanganlik uchun soliq, bundan sement xomashyosi va sement ishlab chiqarishda foydalaniladigan ohaktosh mustasno	9. Mobil aloqa xizmati va alkogolli ichimliklar, shu jumladan, pivo uchun aktsiz solig'idan tushumlar, tegishli ravishda Qoraqalpog'iston Respublikasi, viloyatlar va Toshkent shahri aholisining respublika aholisidagi ulushiga muvofiq.

Shuning uchun ham hozirda mahalliy budjetlarda soliqqa tortish amaliyotimiz kam va yuqori daromad oladigan xo'jalik yurituvchi sub'ektlar guruhlash tizimiga o'tish tadbiri daromadlarni adolatli ravishda soliqqa tortish tizimi tomon muhim qadam bo'ladi. Mahalliy budjet daromadlari tarkibini 2.1-chizmada ko'rib chiqaylik.

2.1.1-rasm.

Mahalliy budjetlar daromadlari tarkibi[53]



2.1.1-rasmga muvofiq, mahalliy budjetlar daromadlari tarkibida o'z daromadlari, biriktirilgan daromadlar, tartibga soluvchi daromadlar va moliyaviy transfertlar o'z o'rniga ega. 2.1.1-chizmada keltirilgan mahalliy budjetlarni

52 O`zbekiston Respublikasi 2019 yil 9 dekabrdagi "2020 yil uchun O`zbekiston Respublikasining Davlat byudjeti to`g'risida" O`RQ-589-son qonuni asosida tuzildi.
53 Ilmiy tadqiqot naijasida muallif tomonidan tayyorlangan

daromadlari tarkibi keltirilgan. Ushbu chizmaga asosan mahalliy budjet daromadlar tarkibiga asosan to‘rt guruhga bo‘linishi ko‘rsatib o‘tilgan. O‘z daromadlari tarkibini tahlil qiladigan bo‘lsak, mahalliy soliqlar va yig‘imlar (er va mol-mulk solig‘i, ayrim tovarlar bo‘yicha savdo huquqini beruvchi ruxsatnomalar uchun yig‘im, bozorlardan tushumlari)dan tashkil topgan.

Mamlakatimizda 2017–2021 yillarda O‘zbekiston Respublikasini rivojlantirish bo‘yicha Harakatlar strategiyasiga muvofiq hamda mahalliy budjetlarning daromadlari bazasini tubdan mustahkamlash, uning yuqori turuvchi budjetlar ajratmalariga qaramligini qisqartirish maqsadida hududlarni kompleks rivojlantirish barqaror moliyalashtirilishini ta’minlash, markaz budjetiga qaramlikni keskin kamaytirish, budjetlararo munosabatlarni tubdan isloh qilish orqali mahalliy budjetlar mablag‘larini boshqarishda joylardagi davlat hokimiyati organlarining mustaqil ish olib borishini kuchaytirish mamlakat budjet siyosatining asosiy vazifalari etib belgilangan[54] . Bugungi kunda ustuvor vazifalarning bajarilishi hamda mahalliy budjetlar daromad bazasini kengaytirish va xarajatlarini maqbullashtirishda ularning manfaatdorligini oshirishni ta’minlaydigan mahalliy davlat hokimiyati organlarining budjet vakolatlari va majburiyatlarini belgilashning zamonaviy mexanizmlarini joriy etishda quyidagilar ko‘rsatib o‘tilgan:

- Qoraqalpog‘iston Respublikasi, viloyatlar va Toshkent shahri, tumanlar va shaharlar hokimliklariga o‘z hududidagi soliq to‘lovchilarni to‘liq qamrab olish va soliqlar yig‘iluvchanligini oshirish, yangi ishlab chiqarish korxonalarini barpo etish, ishlamayotgan, iqtisodiy nochor korxonalarning faoliyatini qayta tiklash orqali mahalliy budjet daromadlarini ko‘paytirish;
- tegishli budjetlarning tasdiqlangan daromadlari rejasini bajarish, qonunchilik doirasida xarajatlar, shu jumladan, ish haqi va unga tenglashtirilgan to‘lovlar o‘z vaqtida va to‘liq moliyalashtirilishini ta’minlash;
- Toshkent shahri, tumanlar va shaharlar budjetlarining umumiy hajmidan 1 foiz miqdorida tuman hokimliklari zaxira jamg‘armalari shakllantirilishi;
- bir moliya yilidan ortiq bo‘lgan davrdagi kassa uzilishlari yuqori budjetdan 2 yilgacha bo‘lgan muddatga yillik 2 foizli budjet ssudalari olish orqali qoplanishi va tegishli budjetlar har chorak yakunida shakllantiriladigan daromadlar rejasidan orttirib bajarilgan qismining mustaqil tasarruf etilishi mahalliy budjetlar daromadlar siyosati motivatsiyasini oshirishda muhim ahamiyat kasb etadi[55] .

Shunga mos ravishda, agar tegishli salmoqni ifodalovchi ko‘rsatkich darajasi qanchalik yuqori bo‘lsa, uning o‘rni ham yuqori va aksincha, xulosaga kelinadi. Shu munosabat bilan 2016-2021 yillar davomida davlat budjeti va mahalliy budjetlar daromadlari tarkibida soliq daromadlarining o‘zgarish dinamikasini 2.1.2-jadvalda ko‘rib chiqamiz.

[54] O`zbekiston Respublikasi Prezidentining 2017 yil 7 iyundagi «Mahalliy byudjetlarni shakllantirishda joylardagi davlat hokimiyati organlarining vakolatlarini kengaytirish chora-tadbirlari to`g‘risida»gi PF-5075-sonli Farmoni.

[55] Moliya vazirligi ma'lumotlari asosida tayyorlandi.

2.1.2-jadval

Hududlar kesimida mahalliy budjetlarining 2018-2023 yillardagi daromadlari[56] (mlrd. so'mda)

Hududlar nomi	2018	2019	2020	2021	2022	2023
Qoraqalpog'iston Respublikasi	1186,2	1292,2	2241,1	2951,9	2743,9	1614,2
Andijon	1026,4	1264,8	1709,0	2624,6	2105,9	2352,2
Buxoro	1155,2	1335,6	1383,0	2409,4	1782,9	1935,4
Jizzax	685,7	715,4	948,3	1240,7	1058,0	1212,9
Qashqadaryo	1447,6	1786,6	2341,1	3783,3	2468,8	2570,3
Navoiy	685,4	745,3	1217,1	1877,6	1540,9	1535,8
Samarqand	1266,6	1557,3	1970,8	2567,0	2385,6	2657,0
Surxondaryo	970,9	1030,4	1378,3	1844,7	1605,7	1754,7
Sirdaryo	547,2	568,5	710,2	816,6	716,5	745,7
Toshkent	1664,8	1774,9	1949,3	3717,3	2395,5	3009,8
Farg'ona	1980,2	2110,9	1833,2	3835,6	2677,3	2904,9
Xorazm	708,2	881,4	1106,3	1467,2	1302,4	1442,7
Toshkent shahar	2115,5	2440,9	2800,1	3801,8	3156,3	4068,6
Jami	**16310,1**	**18536,3**	**22947,9**	**35175,5**	**27702,9**	**29774,8**

2.1.2-jadvaldan ko'rinadiki, hududlar kesimida mahalliy budjetlarning 2016-2023 yillardagi daromadlari 2018 yilga nisbatan daromadlarning ortish ko'rsatkichlari nazarda tutilgan. Ushbu jadvalda ma'lumotlari xuddi yuqoridagi tarzda tahlil qilinsada, biroq mahalliy budjetlarda daromadlarning barqaror sur'atlarda ortishi ta'minlangan.

Mahalliy budjetlar daromadlar manbaini kengaytirish maqsadida qishloq xo'jaligiga mo'ljallangan yerlari bo'lgan yuridik shaxslar tomonidan yer solig'i qishloq xo'jaligi yerlarining normativ qiymatidan kelib chiqqan holda hisoblanishini joriy qilish to'g'risidagi taklifi O'zbekiston Respublikasining yangi tahrirdagi Soliq kodeksi 427-moddasida o'z aksini topgan (O'zbekiston Respublikasi Moliya vazirligining 2021 yil 30 iyuldagi 06/04-01-32/1115-son ma'lumotnomasi). Ushbu taklifni amliyotga joriy etish natijada qishloq xo'jaligiga mo'ljallangan yerlar bo'yicha 2021 yilning I yarim yilida, bu o'zgarish kiritilgunga qadar bo'lgan tizim bo'yicha 156,9 mlrd.so'm o'rniga, 22.3 mlrd.so'm mablag' kelib tushdi, qishloq xo'jaligi mahsulotlari yetishtiruvchilari ixtiyorida 134,6 mlrd.so'm mablag' qoldirilishi ta'minlangan.

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[56] Moliya vazirligi ma'lumotlari asosida tadqiqotchi tomonidan tayyorlandi.

24-son, 491-modda; Qonun hujjatlari ma'lumotlari milliy bazasi, 05.
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QURILISH SANOATI KORXONALARINING IQTISODIY SAMARADORLIGINI OSHIRISH JARAYONI

Annotatsiya: *ushbu maqolada qurilish sanoati korxonalarining ish faoliyati hamda uning iqtisodiy samaradorlik jarayoniga ta'sir etuvchi ichki va tashqi omillarning izohlari keltirilgan.*
Kalit so'zlar: *qurilish sanoati, samaradorlik, mahsulot, ishlab chiqarish, makroiqtisodiy barqarorlik, valyuta munosabatlari, eksport salohiyati.*

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ECONOMIC OF CONSTRUCTION INDUSTRY ENTERPRISES EFFICIENCY IMPROVEMENT PROCESS

Annotation: *this article contains comments on the work activities of enterprises of the construction industry and internal and external factors affecting its economic efficiency process.*
Keywords: *construction industry, efficiency, product, production, macroeconomic stability, foreign exchange relations, export potential.*

Har bir davlatni eng ustuvor va muhim sohasi hisoblangan sanoat sohasini rivojlantirish eng asosiy vazifalardan biridir. Sababi, sanoat shunday bir keng tarmoqki, barcha mamlakatlarning siyosiy, iqtisodiy hamda tashkiliy intilishlari, ularning xo'jalik jihatidan birlashishi, ya'ni iqtisodiy integratsiya tavsifida o'z ifodasini topadi. Natijada barcha mamlakatlarning tabiiy, mehnat va moliyaviy resurslaridan, fan-texnikaning barcha yutuqlaridan oqilona foydalanish imkoniyatlari yuzaga keladi.

Hozirgi kunda jadal sur'atlarda o'zgarayotgan bozor talabi sharoitida ishlab chiqarish samaradorligiga bir qancha omillar o'z ta'sirini ko'rsatmoqda. Bu esa qurilish sanoatida samaradorlikni oshirishda uning manbalariga alohida to'xtalib o'tishni talab etadi. Birinchi yo'nalishda mehnat omili asosiy manba bo'lib, uning malaka ko'nikmasi samaradorlikni ta'minlaydi. Ikkinchi yo'nalishda investitsiyalar, texnologiyalar transferi orqali ishlab chiqarish resurslaridan oqilona foydalanish ta'minlanadi. Shu bilan birga qurilish sanoat korxonalarida samaradorlikni ta’minlash uzoq muddatli faoliyatga asoslanib, mavjud resurslardan foydalanishni yaxshilash hisoblanadi.

V.Yu.Glebov ilmiy tadqiqotlarida ishlab chiqarish samaradorligini ta’minlash asosiy ichki omillar ta’sir etishini ta’kidlab, ular 85%ni, qolgan 15%i esa tashqi omillar hissasiga to‘g‘ri kelashini izohlagan. [1]

Shunday bo‘lsada, qurilish korxonalar faoliyatiga ichki va tashqi omillar bilan birga moddiy resurslar ta’minoti, innovatsion faoliyat va mahsulotlar sifati ham ta’sir qiladi. Jumladan, Sh.N.Zaynutdinov va R.I.Nurimbetovlar ―ishlab chiqarish samaradorligi ichki va tashqi omillarni o‘zaro bir-biriga bog‘liqligini o‘rganib, bunda makroiqtisodiy barqarorlik, valyuta munosabatlari, eksport salohiyatini oshirish, resurslardan samarali foydalanish, boshqarish xorijiy usullarni tatbiq etish, eksportga yo‘naltirilgan ishlab chiqarishni tashkil etish va diversifikatsiyalashga alohida e’tibor qaratish zarurligi asoslangan. [2]

N.I.Rustamov sanoat korxonalarini ishlab chiqarish samaradorligiga ta’sir etuvchi ichki imkoniyatlardan samarali foydalanish va ishlovchilar manfaatdorligini oshirishni «aylanma harakat modeli»ni ishlab chiqqan [3].

O.Rodionov samaradorlikka ta’sir etuvchi omillarni ishlab chiqarishni avtomatlashtirish, xodimlar malakasi, ishlab chiqarish infratuzilmasi, mahsulot sifatini boshqarish, ishlab chiqarish jaraènlarini kuzatish, ishlab chiqarishni bozorga moslashtirish, nazorat, javobgarlik hamda rag‘batlantirishga ajratib guruhga umumlashtirgan holda o‘rgangan [4].

A.M.Kadirov sanoat korxonalarini iqtisodiy barqarorligini o‘rgangan. U korxonalarning rentabelligini ta’minlash uchun moliyaviy, ishlab chiqarish, marketing va texnologik barqarorlik ko‘rsatkichlarini tahlil etgan. Shuningdek,

muallif yuqoridagi to‘rt omil (moliyaviy, ishlab chiqarish, marketing va texnologik) asosida barqaror rivojlanishni hozirgi darajasi va kelgusidagi o‘zgarish dinamikasiga baho bergan [5].

B.O.Tursunov esa o‘zining tadqiqotlarida sanoat korxonalarida ishlab chiqarish samadorligiga ta’sir etuvchi ishlab chiqarish quvvatidan foydalanish darajasini qarab o‘tgan [6].

U samaradorlikni ta’minlashda mahsulot ishlab chiqarish hajmi hamda ishlab chiqarish quvvatlaridan mutanosib foydalanish asosida ishlab chiqarish vositalaridan maksimal darajada foydalanishga alohida e’tibor qaratgan.

Yuqoridagi tadqiqotchilarning qarashlaridan kelib chiqib ishlab chiqarishning samaradorligiga ta’sir etuvchi omillarni shartli ravishda quyidagi guruhlarga bo‘lib o‘rganish zarur (1-chizma). Jumladan, mazkur omillarni mazmun va mohiyatini qarab o‘tamiz.

1-chizma

Ishlab chiqarish samaradorligiga ta'sir etuvchi omillar

Ichki omillar	**Tashqi omillar**
Moddiy-texnik resurslar mutanosibligi	Tashki iqtisodiy aloqalar
Foyda taqsimoti	Moddiy resurslar narxi
Baho siyosati	Ishchi kuchiga bo'lgan talab va takliflar
Korona imidji	Inflyatsiya darajasi
Zamonaviy texnologiyalar va nou-xaularning qo'llanilishi	Bozordagi talab va taklifni o'zgarishi
	Demografik o'zgarishlar

Ichki omillar moddiy-texnik resurslar mutonosibligi, foyda taqsimoti, korxonani marketing siyosati va boshqaruv tizimiga asoslanib, mahsulot va xizmatlarning yangi turlarini joriy qilish, tashkilotning strategiyasi va taktikasini ishlab chiqish, qarorlarni qabul qilish jarayonlarini axborot bilan ta'minlashni yaxshilash, korxona mahsulotlari sifati hamda foyda o'sishini ichki zaxiralarini tahlil qilishni o'z ichiga oladi.

Xulosa qilib aytganda, ishlab chiqarish samaradorligini ta'minlashda, qurilish korxonalarining qurilish bozorida tutgan o'rni, resurslardan foydalanish, narxlashtirish siyosati, mehnat resurslaridan foydalanish, investitsiya va innovatsion siyosat, moddiy resurslar ta'minoti va demografik o'zgarishlar ham o'z ta'sirini ko'rsatadi. Ishlab chiqarish natijalariga ta'sir etuvchi omillarga to'la baho berish uchun iqtisodiy ko'rsatkichlar tizimini o'rganishimiz va baholash usullarini umumlashtirishimiz zarurdir.

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МЕЖДИСЦИПЛИНАРНЫЙ ПОДХОД В ПОДГОТОВКЕ УЧИТЕЛЕЙ МУЗЫКИ: СОЕДИНЕНИЕ ИСКУССТВА, ПСИХОЛОГИИ И ПЕДАГОГИКИ

Аннотация:_В статье рассматривается междисциплинарный подход в подготовке учителей музыки, включающий интеграцию искусства, психологии и педагогики. Анализируются международные практики (Финляндия, США, Япония, Германия, Южная Корея) и опыт Узбекистана. Подчеркивается важность интеграции для формирования гармоничной личности и повышения качества музыкального образования._

Ключевые слова: _междисциплинарный подход, музыкальное образование, психология, педагогика, международный опыт, Узбекистан._

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INTERDISCIPLINARY APPROACH TO MUSIC TEACHERS' TRAINING: CONNECTING ART, PSYCHOLOGY AND PEDAGOGY

Abstract:_The article examines the interdisciplinary approach in training music teachers, integrating art, psychology, and pedagogy. It analyzes international practices (Finland, USA, Japan, Germany, South Korea) and the experience of Uzbekistan. The importance of integration for developing a harmonious personality and improving the quality of music education is emphasized._

Keywords: _interdisciplinary approach, music education, psychology, pedagogy, international experience, Uzbekistan._

ВВЕДЕНИЕ

Современное образование требует от учителей не только глубоких знаний в своей предметной области, но и навыков междисциплинарного подхода. Это особенно актуально для подготовки учителей музыки, где искусство, психология и педагогика переплетаются, создавая условия для формирования гармоничной личности ученика. Президент Республики Узбекистан Шавкат Мирзиёев отметил, что «образование должно стать основой для всестороннего развития каждого человека и общества в целом»

[1]. Это заявление подчеркивает значимость интеграции различных дисциплин в образовательный процесс.

Кроме того, музыка, будучи универсальным языком, играет важную роль в формировании эмоционального интеллекта, социальных навыков и культурной идентичности учащихся. Для успешного обучения в этой области требуется не только музыкальная подготовка, но и знания о психологических особенностях учеников, педагогических подходах и культурных контекстах. Междисциплинарный подход позволяет будущим учителям эффективно работать с учениками, развивая их способности и интерес к музыке.

В условиях глобализации и интеграции культур опыт разных стран в этой области становится бесценным. Изучение международных практик и адаптация их к национальным условиям могут значительно повысить качество музыкального образования. Междисциплинарный подход в обучении позволяет учителю музыки расширить спектр своего воздействия на учеников. Искусство музыки развивает эстетическое восприятие и креативность, психология помогает понять особенности учеников, а педагогика предоставляет инструменты для эффективного обучения. Исследования показывают, что учащиеся, обученные с использованием междисциплинарных методов, демонстрируют более высокий уровень мотивации и творческого мышления [2].

В международной практике внедрение междисциплинарного подхода в музыкальном образовании набирает популярность. Например, в Финляндии музыкальные школы активно сотрудничают с психологами и педагогами, что позволяет разрабатывать индивидуальные программы обучения. В США применяются методы музыкальной терапии для улучшения эмоционального состояния учеников, что способствует их академическим успехам. В Японии акцент делается на интеграцию традиционной музыки в образовательный процесс, что помогает учащимся осознавать свои культурные корни [3].

Так, финская система образования считается одной из лучших в мире благодаря своему подходу к междисциплинарности. Учителя музыки там активно изучают основы психологии и педагогики, что позволяет им эффективно работать с учениками с разными уровнями подготовки. Это способствует не только развитию музыкальных навыков, но и улучшению когнитивных и эмоциональных способностей [4].

В США особое внимание уделяется музыкальной терапии, которая является важным элементом междисциплинарного подхода. Эта практика используется не только в образовательных учреждениях, но и в медицинских центрах и социальных программах. Согласно исследованию Американской музыкальной терапевтической ассоциации, использование музыки в образовательных целях помогает улучшить концентрацию, снизить уровень стресса и повысить общую успеваемость учеников [5].

В Японии в систему музыкального образования активно внедряются элементы национальной культуры. Традиционные инструменты, такие как кото и сякухати, используются для обучения в школах. Это позволяет ученикам не только развивать музыкальные навыки, но и глубже понимать свое культурное наследие. Кроме того, японские школы активно используют технологии для анализа музыкальных произведений, что помогает студентам развивать аналитическое мышление [6].

В Германии акцент делается на интеграцию музыки с другими видами искусства, такими как театр и изобразительное искусство. В рамках программы «Musik und Kunst» ученики изучают связь между музыкой и визуальными образами, что способствует развитию креативности и критического мышления. Учителя музыки проходят специализированную подготовку, которая включает элементы арт-терапии и педагогики [7].

Южная Корея известна своим подходом к музыкальному образованию, где традиции сочетаются с современными методами. Музыкальные занятия включают использование интерактивных технологий, что делает обучение более увлекательным и эффективным. Также большое внимание уделяется развитию эмоционального интеллекта учащихся, что способствует их личностному росту [8].

В Узбекистане также предпринимаются шаги по внедрению междисциплинарных методов в систему музыкального образования. В 2022 году была принята Национальная программа по развитию народного образования в 2022-2026 годах, включающая аспекты интеграции искусства, психологии и педагогики [9]. Особое внимание уделяется обучению педагогов в специализированных музыкальных школах и вузах. К примеру, в Республиканском специализированном музыкальном академическом лицее активно проводятся семинары и тренинги для учителей, посвященные вопросам междисциплинарного подхода.

Влияние психологии на обучение музыке

Психология играет ключевую роль в процессе обучения музыке. Учитель, обладая знаниями о возрастных и индивидуальных особенностях учеников, может выбрать наиболее эффективные методы преподавания. Например, использование принципов позитивного подкрепления помогает повысить мотивацию учеников к занятиям.

Исследования доктора Карла Эмиля Сеашорда, американского психолога, показали, что музыкальные способности можно развивать у большинства людей, если использовать правильные подходы [10]. В Узбекистане также проводятся исследования, направленные на изучение влияния психологических факторов на обучение музыке.

Роль педагогики в музыкальном образовании

Педагогика обеспечивает структурированный подход к обучению, позволяя учителям создавать понятные и последовательные учебные планы. Важно, чтобы учителя музыки не только обучали технике игры на инструменте, но и развивали у учеников любовь к музыке. Примером успешной педагогической практики является использование метода Орфа, который объединяет элементы музыки, движения и речи, способствуя всестороннему развитию учеников.

ЗАКЛЮЧЕНИЕ

Междисциплинарный подход в подготовке учителей музыки играет важную роль в формировании профессиональных компетенций. Интеграция искусства, психологии и педагогики позволяет готовить педагогов, способных эффективно работать с учениками и развивать их творческий потенциал. Узбекистан, следуя международному опыту, предпринимает значительные шаги для внедрения таких методов в систему музыкального образования. Как отметил Шавкат Мирзиёев, "обучение должно быть направлено на развитие гармоничной личности". Этот принцип должен стать основой подготовки учителей музыки в современных условиях.

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КЛАССИФИКАЦИЯ ЛИНЕЙНЫХ И КВАДРАТНЫХ УРАВНЕНИЙ В ТРАКТАКТКЕ МУХАММАДА ИБН МУСА АЛ – ХОРЕЗМИ «КРАТКАЯ КНИГА ОБ ИСЧИСЛЕНИИ АЛГЕБРЫ И АЛ - МУКАБАЛА»

***Аннотация**: Трактат ал–Хорезми «Краткая книга об исчислении алгебры и ал - мукабала» состоит из двух частей, теоретической и практической. В первом часте излагается теория классификации линейных и квадратных уравнений. В ней алгебраические уравнения приводится к каноническим видам и приводиться способы решения примеров. А также показано решение алгебраических уравнений, включая правила поиска решений квадратных уравнений, которые «переоткрывались» несколько раз на протяжении веков в Востоке и Европе.*

***Ключевые слова**: решение, корни, линейные и квадратные уравнеия, классификация*

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CLASSIFICATION OF LINEAR AND QUADRATIC EQUATIONS IN THE TREATISM OF MUHAMMAD IBN MUSA AL-KHWARIZMI "A BRIEF BOOK ON THE CALCULUS OF ALGEBRA AND AL-MUQABALAH"

***Abstract**: The treatise of al-Khwarizmi "A Brief Book on the Calculus of Algebra and Al-Mukabala" consists of two parts, theoretical and practical. The first part presents the theory of classification of linear and quadratic equations. In it, algebraic equations are reduced to canonical forms and methods for solving examples are given. It also shows the solution of algebraic equations, including the rules for finding solutions to quadratic equations, which were “rediscovered” several times over the centuries in the East and Europe.*

***Keywords**: solution, roots, linear and quadratic equations, classification*

«Краткая книга об исчислении алгебры и ал - мукабала» трактакт ал –Хорезми пользовался широкой популярностью на Ближнем и Среднием Востоке и средевековой Европе. Он относился к числу первых сочинений, переведенных с арабского языка на латинь. Имеются два латинского перевода «Краткая книга об исчислении алгебры и ал-мукабала» ал – Хорезми, выполненных в XII век в Испании выдающимся переводчиками: Герардо Кремонским (1114 – 1187гг) и Робертом из Честра (XII в.). В 1983году научная общественность Узбекистана и других стран мира отмечало по решению ЮНЕСКО 1200 – летний юбилей великого среднеазиатского ученого Мухаммада ибн Муса ал – Хорезми, труды которого оставили глубокий след в истории различных сферах науки. Перевод «Краткая книга об исчислении алгебры и ал-мукабала» тракта, сохранившегося в арабской рукописи (Бодлеянская библиотека Оксфордского университета, шифр рукописи: Hunt. 214,ЛЛ. 1-34), принадлежит Б.А.Розенфельду, комментарии составлены Б.А.Розенфельдом и Г.П.Матвиевской).

«Краткая книга об исчислении алгебры и ал - мукабала» ал – Хорезми начинается: Во имя Аллаха милостивого, милосердного. *Это книга, которую написал Мухаммада ибн Муса ал – Хорезми.* Он начал её тем, что сказал: восхвалим Аллаха за его благоденания словами, которых он достоин...

.. Я написал «Краткую книгу по расчетам аль-джабра и аль-мукабалы», которая включает в себя простые и сложные задачи арифметики, распределения наследства, составления завещаний, распределения собственности и правосудия, торговли и все дела, как и землемерие, необходимы людям при проведении каналов, в геометрии и в других подобных различных работах...".

Из этих слов видно что мыслитель в своем в трактате отражает решения вопросов, на которые он дал свой взгляд на их решение. При этом Хорезми заявляет, что намерен также решить вопросы, связанные с экономическими потребностями, распределением наследства согласно законадательством ислама и шариата, а также вопросы, связанные с архитектурой и ирригацией. В общем, Хорезмийская алгебра – это наука о решении числовых, квадратных и линейных уравнений. В трактате излогаеться: «...Я нашёл, что числа, необходимые в аль-джабра и аль-мукабалы бывают трёх видов: корни, квадраты и простые числа, не отнесенное ни к корню, ни к квадрату. Корень — это всякая вещь, умножаема на себя, будь то число, равное или больше единицы или дробь меньщая ее. Квадрат — это то , что получается из корня при его умножении на себя. Простое число — это любое число, называемое словами без отношения к корню или к квадрату». Среди этих трёх видов имеются такие, которые равны друг другу. Например, ты говоришь: квадраты равны корням, квадраты равны числу или корни равны числу.

1.Квадраты равны корню: в современных обозначениях $cx^2 = bx$
2.Квадраты равны числам: в современных обозначениях $cx^2 = a$
3.Число равно или корни равны числу; в современных обозначениях $bx = a$;
где **a, b, c** — положительные числа.

Эти три вида, то есть корни, квадраты и числа, соединаются по три, и имеются три рода соединений, а именно:: квадраты и корни равны числу, квадраты и число равны корням, корни а число равны квадратам.
4. Что касается квадратов и корней, равных числу: в современных определении $cx^2+ bx = a$
5. Что касается квадратов и чисел равных кореням: в современных обозначениях $cx^2+a=bx$
6.Что касается корней и числа, равных квадату: в современных обозначениях $bx + a = cx^2$

Таковы те шесть видов, которые дается в начале трактата.

«…Я истолковал их и сообщил о том, что в трех из этих видов нет раздвоения [числа] корней и объяснил необходимое для них правило. Что же касается [случаев], когда необходимо раздвоения [числа] корней в трех остальных главах, то я достоверно изложил их в [этих] главах и начертил для каждой главы чертёж, объяснясняющий причину раздвоения. «Что касается того, что квадраты и корни равны числу: $cx^2+ bx = a$, то если, например, вы скажете: квадрат и десять корней равны тридцати девяти дирхамам, $x^2+ 10x = 39$ то это значит, что если к числу прибавится нечто, равное десяти корням. квадратных, будет произведено тридцать девять. Правило такое: раздвой[числа] корней, получится в этой задаче пять, умножь на себя, получится двадцать пять. Прибавь это к тридцати девяти, получится шестьдесят четыре. Извеки из этого корень. будет восемь, вычтите из него половину корней [числа], т. е. пять, останется три: это и есть квадратный корень, который вы искали, а квадрат равен девяти. В современных обозначаниях уравнение имеет вид $x^2+ 10x =39$, и решение ал – Хорезми может быть записано в виде:

$$x = \sqrt{(\frac{10}{2})^2 + 39} - \frac{10}{2} = \sqrt{25+39} - 5 = \sqrt{64} - 5 = 8-5 = 3$$

Что касается квадратов и чисел, равных корням, то если например, ты скажежь:: квадрат и число двадцать один дирхам равны его десяти корням, $x^2+21 = 10x$; то это означит: если к квадрату прибавить двадцать один дирхам, то результат будет равен к десяти корням этого квадрата. Правило его такова: раздвой [числа] корней будет пять. Умножь его на себя, будет двадцать пять. как было сказано, вычти из этого двадцать один, которые квадратом останется четыре. Извлеки из этого корень, будет два. Вычтик это из полвины [числа] корней, так же пяти, остается три: это и будет корень квадрата, который ты искал» .

В современных обозначаниях уравнение имеет $x^2+21 = 10x$, и решение ал – Хорезми может быть записано в виде:

$x = \frac{10}{2} \pm \sqrt{(\frac{10}{2})^2 - 21} = 5 \pm \sqrt{4} = 5 \pm 2;\ x_1 = 3,\ x_2 = 7.$ ($x_1^2 = 9;\ x_2^{\ 2} = 49$)

Аль-Хорезми помимо решения этой задачи поясняет следующее: «Если вы столкнулись с проблемой, которая привела вас к этой главе, попробуйте найти ее правильное решение с помощью сложения, если это не сработает, необходимо вычитание».

В этой главе используются как сложение, так и вычитание. В остальных трех главах дело обстоит иначе, в которых корни [число] удваиваются. Знайте, что если в этой главе корни [число] удваиваются и произведение меньше количества дирхамов, прибавленных на квадрат. , решить проблему невозможно. (уравнение $x^2 + a = bx$ имеет два мнимых корня $\left(\frac{b}{2}\right)^2 < a$). Если оно в точности равно [числу] дирхамов, то корень квадратный равен половине корней /число/ без сложения и вычитания. (уравнение **($x^2 + a = bx$ при $\left(\frac{b}{2}\right)^2 = a,\ x = \frac{b}{2}$** имеет один корень**).** Всякий раз, когда вы встречаете два квадрата или больше или меньше, они, как я объяснил вам в первой главе, типа, один квадрат. Объясняется и доказывается равенство корней и чисел квадрату, $bx + a = cx^2$ **.**Во времена Аль-Хорезми не существовало понятия отрицательных чисел, поэтому операции сложения выполнялись в рамках описанных выше уравнений, а операции вычитания не показывались. Поэтому Хорезми описал только решения квадратных уравнений с положительными корнями. Причина, по которой не рассматривается решение квадратных уравнений с нулевыми хорезмийскими корнями, заключается в том, что оно связано с задачами практического характера - распределением наследства. Он доказал решения некоторых квадратных уравнений геометрически. Трактат аль-Хорезми « Ал - китоб ал – мухтасар фи ҳисоб ал – жабр вал – муқобала » является первой книгой, в которой систематически классифицируются квадратные уравнения, формулируются решения и описываются геометрические доказательства. Связанные с квадратными уравнениями, были освещены в работах Абу Райхана Беруни, Умара Хайяма, Бахауддина аль-Омули, Джамшида Коши и других ученых Востока. В Европе нахождение решений квадратных уравнений методом аль-Хорезми описано в «Книга абак», написанной в 1202 году итальянским математиком Леонардо Фибоначчи. В этой книге ясно описаны интерпретации древнегреческих, индийских, восточных ученых в области математики, в том числе решения квадратных уравнений. Автор первым в Европе ввел понятие отрицательных чисел, а также самостоятельно создал методы поиска решения новых алгебраических примеров и задач. Правила нахождения общих решений квадратного уравнения вида $x^2 + bx = c$ в различных сочетаниях коэффициентов b, c были введены в Европе в 1544 г. М. Штифелем. Общая формула для поиска решений квадратных уравнений была доказана как теорема в работах Франсуа Виета в 1591 году, причем Виет также ограничивался поиском только положительных корней уравнений. Виет сформулировал теорему следующим образом: «Если ***B+D*** умножить на ***A*** и вычесть $\boldsymbol{A^2}$ то будет равно ***BD*** где ***A*** равно ***B*** и ***D***» В работах Виета, ***A*** представляет собой неизвестное (теперь «***x***»), B и D — коэффициенты перед неизвестным. Выражение теоремы на языке современной алгебры: $(a+b)x - x^2 = ab,\ x^2 - (a+b)x + ab = 0,\ x_1 = a$, *и* $x_2 = b$.

Решение квадратных уравнений по правилам, данным аль-Хорезми, применялось почти до XVI века. Одна из причин этого в том, что вошедшее в привычку к нам с буквенными обозначениями уравнение $ax^2+bx+c = 0$ формировалось с перерывами в XVI веке в трудах Рене Декарта (1596–1662) и Франсуа Виета (1540–1603. В буквальном определении Виетом квадратных уравнений образовалась форма $x^2 + px + q = 0$, а ее корнями были обозначены ва x_1 и x_2

В этом случае $(x - x_1) \cdot (x - x_2) = x^2 + px + q$ откуда: $x^2 - (x_1 + x_2)x + x_1 \cdot x_2 = x^2 + px + q$; $\begin{cases} x_1 \cdot x_2 = q \\ x_1 + x_2 = -p \end{cases}$

Это называется формулировкой теоремы Виета для видов $x^2 + px + q = 0$ квадратных уравнений.

В середине XVI века итальянские математики Н.Тарталья, Дж.Кардано и Р.Бомбелли признали существование положительных и отрицательных нулевых корней уравнений. В XVII веке в трудах Жирара, Р.Декарта, И.Ньютона и других учёных буквальное выражение квадратных уравнений, методы и формулы нахождения корней были описаны в их современном виде. Долгое время считаться, что такие уравнения $x^2+1 = 0$;*и* $2x^2 + x + 1 = 0$, не имеют реальных решений, поскольку они не существуют.

$ax^2+bx+c = 0$ квадратном уравнении **a,b** и **c** действительные числа, его корни $x = \dfrac{-b \pm \sqrt{b^2 - 4ac}}{2a}$, если $b^2 - 4ac > 0$ есть два действительных корня, если $b^2 - 4ac < 0$ то действительных корней нет . Эти соображения, наряду с развитием алгебры, привели к расширению понятии числа, т. е. понятие комплексных чисел было признано на протяжении почти трёх столетий, вплоть до XIX века.

В 1545 итальянский алгебраист Дж. Кардано предложил ввести новые натуральные числа при нахождении корней уравнений, не имеющих решения в множестве действительных чисел. Он показал, что система уравнений $\begin{cases} x + y = 10 \\ xy = 40 \end{cases}$ имеет решения вида $x = 5 \pm \sqrt{-15}$, $y = 5 \pm \sqrt{-15}$ только по правилам алгебры с такими выражениями. Пришлось работать, предполагая, что $\sqrt{-a} \cdot \sqrt{-a} = -a$. Кардано называл такие величины «чисто» отрицательными и даже «иррационально отрицательными», чего считал бесполезным и старался

избегать. В 1572 итальянский алгебраист Р.Бомбелли опубликовал книгу, содержащую основные правила арифметических действий над такими числами. Название
«абстрактные числа» было введено Р. Декратом в 1637 г., а в 1777 г. один из крупнейших математиков XVIII века Л. Эйлер предложил использовать первую букву ***i*** французского слова «imaginaire» («абстрактное»).) для обозначения числа **-1**. Символ ***i*** широко распространен в работах К. Гаусса. В течение XVII века продолжалась дискуссия об арифметической природе абстракций, возможности придания им геометрической интерпретации, а о приемах и правилах выполнения операций над комплексными числами вплоть до XIX века. Корены уравнения $x^2+1=0$; $x^2 = -1$, $x = \pm\sqrt{-1}$, $x = \pm i$ виде познается. Число корней уравнений продолжало доказываться как фундаментальная теорема алгебры на протяжении нескольких столетий. В XVIII в. Эйлер, Даламбер, Лагранж и Вандермонд представили различные доказательства. С 1799 г. К. Гаусс четыре различных доказательства основной теоремы алгебры. Этапы нахождения корней квадратного уравнения: Древневавилонский, греческий, китайский, индийский, восточный и до XVI века европейские математики искали и открывали способы нахождения положительных корней, а позже нулевых и отрицательных, т.е. корней действительных чисел.
В XIX веке они доказали правила нахождения корней алгебраических уравнений с комплексными числами. Алгебраические уравнения, включая правила поиска решений квадратных уравнений, «переоткрывались» несколько раз на протяжении веков, но классификация квадратных уравнений аль-Хорезми имеет важное научное значение.

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МЕТОДЫ ПОВЫШЕНИЯ ПЛАТЕЖЕСПОСОБНОСТИ ОРГАНИЗАЦИИ

Аннотация: *Статья посвящена рассмотрению методов повышения платежеспособности организации, которые играют ключевую роль в обеспечении финансовой устойчивости компании. Платежеспособность отражает способность организации своевременно и в полном объеме выполнять свои обязательства перед кредиторами, поставщиками, работниками и государственными органами. В статье анализируются различные подходы, включая финансовый анализ, оптимизацию структуры капитала, управление оборотными средствами, улучшение операционной эффективности, планирование денежных потоков и реструктуризацию задолженности.*

Ключевые слова: *платежеспособность, организация, финансовое состояние, ликвидность, оборотные средства, реструктуризация, денежные потоки, оптимизация капитала, финансовое планирование.*

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METHODS OF INCREASING THE SOLVENCY OF AN ORGANIZATION

Abstract*: The article is devoted to the consideration of methods for increasing the solvency of an organization, which play a key role in ensuring the financial stability of the company. Solvency reflects an organization's ability to meet its obligations to creditors, suppliers, employees, and government agencies in a timely and complete manner. The article analyzes various approaches, including financial analysis, capital structure optimization, working capital management, operational efficiency improvement, cash flow planning and debt restructuring.*

Keywords*: solvency, organization, financial condition, liquidity, working capital, restructuring, cash flows, capital optimization, financial planning.*

Платежеспособность организации — это ключевой показатель, отражающий способность предприятия выполнять свои обязательства перед внешними и внутренними кредиторами. Поддержание высокого уровня платежеспособности важно для обеспечения финансовой устойчивости бизнеса, укрепления доверия инвесторов и партнеров, а также предотвращения рисков банкротства. В статье рассматриваются основные методы повышения платежеспособности, направленные на оптимизацию финансовых и операционных процессов в организации.

Анализ текущего финансового состояния

Одним из первых шагов на пути к повышению платежеспособности является анализ финансового состояния компании. Для этого применяются различные финансовые коэффициенты, такие как коэффициент ликвидности, коэффициент оборачиваемости, а также анализ структуры активов и пассивов. Эти показатели помогают выявить слабые стороны в финансовом управлении и предлагают пути для их устранения.

Оптимизация структуры капитала

Оптимизация структуры капитала направлена на соотношение заемных и собственных средств. Высокий уровень долговой нагрузки может ухудшить платежеспособность, поэтому важно обеспечить баланс между внутренними и внешними источниками финансирования. Методы оптимизации включают рефинансирование долгов, выпуск акций для увеличения собственного капитала и снижение зависимости от заемных средств.

Управление оборотными средствами

Эффективное управление оборотными средствами, включая дебиторскую задолженность, запасы и кредиторскую задолженность, способствует улучшению ликвидности. Внедрение современных методов управления запасами и дебиторской задолженностью позволяет ускорить оборот денежных средств, что непосредственно влияет на повышение платежеспособности.

Повышение операционной эффективности

Увеличение операционной эффективности, снижение издержек и улучшение рентабельности являются важными факторами повышения платежеспособности. Эти меры включают оптимизацию производственных и административных процессов, улучшение планирования и прогнозирования, а также внедрение новых технологий и методов управления.

Финансовое планирование и управление денежными потоками

Создание системы финансового планирования и контроля денежных потоков позволяет эффективно управлять поступлениями и расходами, минимизируя риски кассовых разрывов. Прогнозирование денежных потоков и использование финансовых инструментов для хеджирования рисков способствуют стабилизации финансового состояния компании.

Реструктуризация задолженности

Реструктуризация задолженности может быть необходима для организаций, сталкивающихся с проблемами платежеспособности. Это включает в себя переговоры с кредиторами о снижении долговой нагрузки, продлении сроков погашения долгов и возможной конверсии долга в капитал.

Этот процесс позволяет снизить финансовые риски и улучшить платежеспособность.

Привлечение внешних источников финансирования

Если внутренние ресурсы не достаточно для поддержания ликвидности, организации могут привлечь внешнее финансирование, например, через эмиссию акций, выпуск облигаций или привлечение банковских кредитов. Однако важно учитывать риски, связанные с ростом долговой нагрузки.

Повышение платежеспособности организации — это многогранный процесс, требующий комплексного подхода и применения различных методов, от анализа финансового состояния до реструктуризации долгов и оптимизации операционной деятельности. Эффективное управление ликвидностью и финансовыми рисками поможет организации укрепить свою устойчивость и избежать финансовых трудностей.

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РОЛЬ СЕМЕЙНОГО ПРЕДПРИНИМАТЕЛЬСТВА В РАЗВИТИИ НАЦИОНАЛЬНОЙ ЭКОНОМИКИ

Аннотация. *Бурное развитие экономики, повышение уровня жизни населения во многом тесно связаны с перспективами малого бизнеса и семейного предпринимательства, поэтому особое значение придается изучению научных основ семейного предпринимательства. В мировой практике обеспечение занятости населения за счет развития предпринимательства в семьях, подчеркивалось, что расширение источников доходов, обеспечение трудовой, физической и духовной зрелости подрастающего поколения, а также, что в законодательстве Узбекистана необходимо предусмотреть льготное кредитование и страхование семейного бизнеса.*

Ключевые слова: *Семейное предпринимательство, семейное предприятие, семейное предпринимательство преимущества, занятость, семейная экономика, семейная собственность, семейные сбережения, экономическая трансформация, экономическая либерализация, поддержка семейного предпринимательства, льготное кредитование, маркетинговые исследования.*

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THE ROLE OF FAMILY ENTREPRENEURSHIP IN THE DEVELOPMENT OF THE NATIONAL ECONOMY

Abstract. *Rapid economic development, improving the standard of living of the population are closely related to the prospects of small business and family entrepreneurship, so special importance is attached to the study of the scientific foundations of family entrepreneurship. In world practice, ensuring employment of the population through the development of entrepreneurship in families, it was emphasized that expanding sources of income, ensuring labor, physical and spiritual maturity of the younger generation, and also that the legislation of Uzbekistan must provide for preferential lending and insurance of family business.*

Keywords: *Family entrepreneurship, family enterprise, family entrepreneurship advantages, employment, family economy, family property, family savings, economic transformation, economic liberalization, support for family entrepreneurship, preferential lending, marketing research.*

В нашей стране все большее внимание уделяется поддержке и развитию малого бизнеса и семейного предпринимательства, которые играют все более важную роль в решении задач обеспечения занятости и устойчивого роста доходов населения. В этой связи пункт 4 Указа Президента Республики Узбекистан от 21 февраля 2024 года № ПФ-37 «О Государственной программе по реализации Стратегии «Узбекистан-2030» в «Год поддержки молодежи и предпринимательства» «В целях широкой популяризации предпринимательства среди молодежи и создания дополнительных возможностей для ведения бизнеса:

- не менее 40 процентов кредитов, выделяемых по программе семейного предпринимательства, будут направлены на развитие молодежного предпринимательства;
- Принято решение ввести практику проведения конкурсов «Молодой предприниматель» с 1 июня 2024 года.

В этой связи Агентство по делам молодежи будет осуществлять отбор перспективных бизнес-проектов и идей молодежи на конкурсной основе на этапах «район – область – республика», уделяя особое внимание проектам и идеям молодых предпринимателей с ограниченными возможностями, и отберут их на республиканском этапе. Определено, что каждому успешному проекту будут выделены льготные кредиты в размере до 1000-кратной базовой расчетной величины, а владельцы победивших бизнес-проектов и идей будут направлены за рубеж на повышение квалификации за счет средств Фонда поддержки молодых предпринимателей.

Ведь стремительное развитие экономики нашей страны и повышение уровня жизни населения во многом тесно связаны с перспективами малого бизнеса и семейного предпринимательства.

Исходя из этого, развитие данного сектора определено как приоритетное. Исходя из социального влияния семейного предпринимательства не только на производство товаров и услуг, но и на обеспечение занятости и благосостояния населения, внедряются эффективные механизмы поддержки этого сектора. В частности, такие меры, как совершенствование действующей нормативно-правовой базы их поддержки, предоставление банковских кредитов по разумным процентным ставкам, а также дальнейшее расширение налоговых льгот, рассматриваются как важные факторы повышения эффективности их деятельности. В любой экономической системе домохозяйства стали важной и решающей силой для государства. Даже в условиях рыночной экономики развитие домохозяйств, особенно семейного предпринимательства, имеет большое значение. В результате трансформации экономики возрастает роль семейного предпринимательства в экономике.

Большинство людей получают базовые экономические знания от своих семей. Совместное ведение бизнеса с членами семьи помогает им не только сообща решать общие проблемы, но и формировать чувство взаимопомощи, повышать квалификацию подрастающего поколения, учиться на примере взрослых, чтобы применять их на практике в своей работе. будущее. .

Одной из важных функций домохозяйств в рыночной экономике является организация семейного предпринимательства. «Семейное предпринимательство — инициативная, самостоятельная деятельность, направленная на получение прибыли, основанная на оптимальном использовании семейных средств». «Семейный капитал представлен здесь как физический, социальный, финансовый и интеллектуальный капитал членов семьи».

Постановление Президента Республики Узбекистан от 02.04.2024 г. №ПП-149 «О дополнительных мерах по совершенствованию финансирования предпринимательских инициатив населения в рамках программ развития семейного предпринимательства» направлено на обеспечение занятости и получение доходов. населения. В целях системного продолжения мер по финансовой поддержке деятельности самозанятых граждан с 1 апреля 2024 года будут выделяться кредиты самозанятым гражданам (за исключением граждан, имеющих основное место работы) в пределах рамки программ следующие:

- до 33 млн сумов, с возможностью дополнительного револьверного погашения по истечении одного года в размере до 50 млн сумов в зависимости от эффективности предпринимательской деятельности заемщика, целевого использования кредита, а также при необходимости группового поручительства (не менее 3 граждан));

- использовать эти кредиты в нескольких направлениях развития домохозяйств (птицеводство, кролиководство, животноводство, пчеловодство, рыболовство, компактные теплицы);

- до 50 млн сумов без обеспечения для собственников и арендаторов земельных участков площадью более 10 соток;

- Принято решение о выделении до 100 млн сумов без залога на строительство компактных теплиц площадью 10 га и организацию рыболовной деятельности.

В этой связи кредиты на развитие животноводства предоставляются на закупку скота (крупного рогатого скота, овец, коз), идентифицированного (комбинированным методом) и фактически сданного районным (городским) ветеринарным отделом;

Для открытия бизнеса в домохозяйстве гражданам, желающим заниматься бизнесом за счет собственных внутренних ресурсов, могут быть предоставлены кредиты наличными на строительство теплиц, разведение скота и посадку сезонных культур на приусадебных участках под гарантию банка и помощник хокима по реализации данных мероприятий. отмечено.

Предоставление льготных кредитов, установленное настоящим постановлением, создаст необходимые условия и откроет широкие возможности, особенно для сельской молодежи, для обеспечения занятости и расширения источников доходов.

Если обратиться к историческим источникам, то можно сказать, что многие известные компании, работающие сегодня, изначально организовывали свою деятельность как семейные предприятия. В частности, семейное предприятие Dalmayr, начавшее свою деятельность в начале XVIII века с продажи кофе, семейное предприятие Charles Tissot & Son, основанное в 1853 году и выпускающее часы марки Tissot, а также бренд ASHAN, принадлежащий французской компании В качестве примеров можно привести сеть супермаркетов «Mullet Family» (с более чем 130 тысячами сотрудников и годовым доходом более 23 миллиардов долларов) и другие.

PricewaterhouseCoopers и Family Capital составили рейтинг семейных предприятий на основе данных за 2018 год. Крупнейшей семейной компанией по объему выручки является Walmart, принадлежащая американской семье Уолтон, с оборотом в 495 миллиардов долларов. заняла 1-е место с доходом в 1,1 млрд долларов.

В настоящее время в мировой практике особое значение придается изучению научных основ семейного предпринимательства. В этой связи на международном уровне издаются три специализированных журнала: «Journal of Family Business Strategy» (Elsevier), «Family Business Review» (Sage) и «Journal of Family Business Management» (Emerald). Также действует Международная академия исследований семейного предпринимательства (IFERA). Семейное предпринимательство — старейший и наиболее распространенный институт бизнеса в мире. Поэтому семейное предпринимательство занимает особое место в экономике многих стран. В частности, в Великобритании он обеспечивает 75% всех предприятий, рабочих мест и почти 50% ВВП. В странах Европейского Союза семейный бизнес составляет 85% всех предприятий, в Испании — 75% всех предприятий и 65% ВВП. В Соединенных Штатах семейный бизнес составляет 90 процентов всех предприятий и 60 процентов ВВП. В Италии семейные ремесленные предприятия, состоящие из 2-3 человек, обеспечивают 18% от общего объема экспорта и играют важную роль в обеспечении занятости и экономическом росте.[1] Стоит отметить, что при формировании рейтинга крупных семейных предприятий по странам в него были включены США (170 таких предприятий), Германия (119), Китай (57) и Россия (11).

Также в список включены зарегистрированный в Нидерландах холдинг Exor, контролируемый итальянскими семьями Анелли и Форд, немецкий производитель автомобилей BMW, контролируемый крупными семьями, американский производитель компьютеров Dell, южнокорейская технологическая корпорация LG и швейцарская фармацевтическая компания Roche. включен в этот рейтинг.

В США часто проводятся опросы среди компаний, и в качестве основных причин неудач часто называют следующее: 1) отсутствие глубоких знаний, несоответствие опыта (например, опытный инженер, но неопытный продавец), коммерческие, финансовые, отсутствие опыта в сферах поставок, производства и управления; 2) небольшой объем продаж; 3) конкуренция; 4) очень высокие транзакционные издержки. Однако чаще всего компании терпят крах не из-за нехватки капитала или инвестиций, а из-за нерешенных проблем управления.

Предоставление информации затруднено, и зачастую не хватает инструментов для проведения маркетинговых исследований. Это ставит семейный бизнес в невыгодное положение на рынке. Поэтому создание эффективной системы поддержки малого бизнеса (в том числе семейного) со стороны государства и общества является важным условием его развития.

Развивая предпринимательство в семьях, можно обеспечить занятость населения в стране, расширить источники их доходов, увеличить число налогоплательщиков, обеспечить физическую и духовную зрелость подрастающего поколения, а также способность адаптироваться к современным условиям. требования рыночной экономики. Для развития семейного предпринимательства в нашей стране необходимо изучать зарубежный опыт, анализировать эффективность проводимых в этом направлении реформ, практическую ситуацию их реализации в регионах, разрабатывать предложения и рекомендации по выявленным проблемам.

Семейному бизнесу нужен денежный поток. Льготное кредитование является одним из важнейших направлений государственной поддержки. Банк всегда помогает крупным, солидным предприятиям. Маловероятно, что малому бизнесу, особенно начинающемуся, выдадут кредит при обычных обстоятельствах. Поэтому законодательство Узбекистана должно предусматривать льготное кредитование и страхование семейного бизнеса.

Как известно, семейное предпринимательство является наиболее массовым сектором экономики в условиях рыночной экономики, его развитие оказывает существенное влияние на экономический рост, объем валового внутреннего продукта и, в первую очередь, на занятость и доходы населения. Речь идет не только о количественных показателях — этот фактор изначально рыночно-специфичен и требует опережающего развития современной рыночной инфраструктуры. Это поможет защитить предприятия данного сектора от экономического кризиса.

Основными преимуществами и характеристиками семейного предпринимательства являются: а) возможность принимать удобные и быстрые решения. По сравнению с крупными предприятиями структуры принятия управленческих решений в семейном бизнесе упрощены, что позволяет им быстро адаптироваться к изменениям рыночной конъюнктуры; б) производители больше ориентированы на рынок этого региона. Семейное предпринимательство идеально подходит для изучения правил, обычаев и других особенностей местного рынка; в) сохранение занятости и создание новых рабочих мест. Эта проблема крайне актуальна и для Узбекистана; Постоянный рост населения приводит к увеличению избыточной рабочей силы, и семейное предпринимательство может сыграть роль амортизатора, поглощая свободную рабочую силу; ж) выполняют вспомогательные функции по отношению к крупным производителям. Крупные предприятия, на базе которых передаются этапы производственного процесса семейному бизнесу, выводят этот процесс из-под централизованной системы управления; г) небольшие первоначальные инвестиции. Сроки создания семейного бизнеса невелики; их можно быстро и дешево переоснастить, внедрить новые технологии и автоматизировать производство, достигая оптимального сочетания машинного и ручного труда; д) экономическая эффективность производства на семейных предприятиях высокая; к) инновационный характер семейного бизнеса. Большинство экономистов подчеркивают, что малый бизнес играет важную роль в ускорении научно-технического прогресса.

По нашему мнению, основываясь на зарубежном опыте, можно сделать следующие выводы относительно поддержки государственных и негосударственных организаций развития семейного предпринимательства в нашей стране:

- развитие инфраструктурных институтов, поддерживающих семейное предпринимательство на начальных этапах его деятельности (микрофинансовые банки, специальные фонды, консультационные и информационные центры и т.п.);

- организация различных мероприятий и тренингов для поддержки женщин и молодежи, желающих открыть семейный бизнес, вхождения в эту сферу и открытия собственного дела;

- создание эффективных условий для использования субъектами семейного предпринимательства государственных средств, финансовых, материально-технических и информационных ресурсов, а также научно-технических разработок и инновационных технологий;

- повсеместное внедрение упрощенной электронной системы регистрации семейных предприятий, лицензирования их деятельности, сертификации продукции, представления государственной статистической и бухгалтерской отчетности;

- поддержка внешнеэкономической деятельности семейных предприятий, в том числе содействие развитию торговых, научно-технических и производственных связей с зарубежными странами;

- организация системы подготовки, переподготовки и повышения квалификации кадров для семейного бизнеса.

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РОСТ, РАЗВИТИЕ И УРОЖАИНОСТЬ ХЛОПЧАТНИКА В ЗАВИСИМОСТИ ОТ РАЗЛИЧНОЙ СТЕПЕНИ ПРЕДПОСЕВНОТО УПЛОТНЕНИЯ ПОЧВЫ

Аннотация:.*Поверхность поля уплотнена неравномерно и сверхуплотнена подшипниками пушек. Новый универсальный инструмент предотвращает эти негативные аспекты предсевной обработки, который разрабатывается на основе KFG-3.6.*

Ключевые слова: *Целью настоящей работы является изучение влияние различной степени уплотнения почвы и перед посевом этими орудиями на агротехнические показатели.*

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GROWTH, DEVELOPMENT AND PRODUCTIVITY OF COTTON DEPENDING ON VARIOUS DEGREE OF PRE-SEEDING SOIL COMPACTION

Abstract.*The surface of the field is compacted unevenly and is over-compacted by the undercarriages of the guns. The new pre-sowing universal tool* *being created prevents these negative as*pects of pre-sowing treatment, which is being developed on the basis of KFG-3.6.

Key words :*The purpose of this work is to study the influence of various degrees of soil compaction and before sowing with these tools on agricultural technical indicators ..*

В зоне засоленных земель выравнивание и уплотнение почвы - обязательные приемы при подготовке её под посев. В результате прикатывания плотность почвы увеличивается, поэтому необходимо знать величину оптимальной плотности почвы, при которой семена и корни растений будут находится в благоприятных условиях для своего развития. Также необходимо знать и пределы увлечения плотности, превышая которые в почве могут быть созданы условия, отрицательно влияющие на рост и развитие растений.

В настоящее время для предпосевной обработки почвы под хлопчатник преимущественно используются чизели-культиваторы, дисковые и зубовые бороны. После обработка производится выравнивание и уплотнение поверхности поля при помощи малы-выравнивателей. Однако, эти агрегаты далеко не удовлетворяет требования агротехники орошаемого земледелия. Особенно на засоленных, тяжелых и средних по механическому составу почвах, где проводится промывные поливы, прибегают к многократным обработкам почвы этими орудиями и то, качество обработки используются техника, затягивается сроки сева. Поверхность поля уплотняется неравномерно и переуплотняется ходовыми частями орудий. Создаваемое новое предпосевное универсальное орудие предотвращает эти отрицательные стороны предпосевной обработки, которое разрабатывается на базе КФГ-3,6.

Целью настоящей работы является изучение влияние различной степени уплотнения почвы и перед посевом этими орудиями на агротехнические показатели.

Исходя выше указанных задач, на опытном участке Каракалпакском научно-исследовательском институте земледелия проводился специальный полевой опыт.

Опыт заложен по следующей схеме

№ вар	Способ обработки почвы	Объемная масса, г/см^3	Твердость, кг/см^2
1.	Боронование, малование 3-х кратное (контроль)	1,33-1,35	4,3-4,6
2.	Обработка с КФГ-3,6 катками	1,10-1,17	2,5-3,1
3.	Обработка с КФГ-3,6 катками	1,30-1,32	4,1-4,2
4.	Обработка с КФГ-3,6 катками	1,4-1,45	5,0-5,2

Почва под опытным участком староорошаемая, среднезасоленная, с глубиной залегания грунтовых вод 2,0-2,5 метра, по механическому составу среднесуглинистая, предшественником за последние три года был хлопчатник.

Площадь под опытным участком 1,0 га. Площадь учетных делянок 360 м^2. Расположение делянок в один ярус. Повторность опыта четырехкратная.

В исследовании были изучены: степень уплотнения почвы перед посевом новым орудием, полевая всхожесть семян, рост и развитие и урожайность хлопчатника.

Степень уплотнения характеризуется твердостью и объемной массой. Твердость почвы определялось плотномером ПП-1 конструкции ВИСКОМ на горизонтах 0…5,5…10, с последующей расшифровкой записанных диаграмм. Для определение средней высоты надо найти площадь, ограниченную диаграммой и осью абсцисс путем планометрирования и твердость почвы определялся по формуле:

$P = \frac{h*z}{S}$ где h-высоте диаграммы, мм

S-площадь сечения плунжера, см

Z -жесткость измерительной пружены, кг/мм.

Объемная масса определялась взвешиванием почвы определенного объема, взятых проб без нарушения строения почвы, с помощью специального и цилиндре. Объемная масса определялась по формуле:

$M = \frac{M*100}{(100+W)V}$ г/см^3 М - масса взятой пробы, г .

W - влажность почвы, %.

V - объем цилиндра ,см^3 .

Полевая всхожесть семян хлопчатника при различных способах предпосевного уплотнения почвы определялась на закрепленных погонных метрах в рядках каждого варианта. Промер высоты главного стебля подсчет плодоэлиментов произведены из 100 учетных растений в каждом варианте.

Определения густоты стояния растений производился путем подсчета всех растений в пределах каждого рядка делянки. Средняя масса коробочек определялась перед каждом сбором, путем взвешивание собранных коробочек из 50 растений. Учет урожая хлопчатника производился в раздельным взвешиванием собранных хлопка-сырца по вариантам.

После вспашки предпосевную обработку в контрольных вариантах провели существующем способом. В изучаемых вариантах с фрезерным культиватором КФГ-3,6 с катком. Для получения необходимой плотности производили регулировку давления катка на почву при помощи балластных грузов. При помощи катков установили плотности почвы близких указанных в схеме опыте. В контрольном варианте плотности почвы измеряли после трехкратного прохода бороны с малой.

Плотности почвы различного способа уплотнения

на глубине 0-10 см.

	I		II		III		IY		ср.	
№ п/п	Объем ный масса, г/см^3	Твер дость, кг/см^3	Объем ный масса, г/см^3	Твер дость кг/см^3	Объем ный масса, г/см^3	Твер дость, кг/см^3	Объем ный масса, г/см^3	Твер дость кг/см^3	Объем ный масса г/см^3	Твер дость. кг/см^3
1.	1.36	5.0	1.34	4.4	1.37	4.6	1.35	4.7	1.35	4.7
2.	1.18	3.2	1.15	3.4	1.14	3.6	1.17	2.9	1.16	3.3
3.	1.35	4.5	1.31	4.0	1.32	4.0	1.28	4.2	1.32	4.2
4.	1.36	4.9	1.39	4.6	1.37	4.6	1.42	4.8	1.39	4.9

По данным исследований видно что, новый способ предпосевной обработки почвы с оптимальным уплотнением оказало положительное влияние на рост, развитие растений. Количество коробочек изменялось в зависимости от схемы опыта Самый высокий по росту (80,5 мм) и количества коробочек (10,7 шт) получен на третьем варианте.

Рост и развтие хлопчатника

№ вар	Высота главного стебля, см.		Количество коробочек на одном кусте	
	I.YII.	I.YIII.	I.YIII.	I.IX.
1.	24,18	75,4	4,75	9,89
2.	23,63	74,05	3,95	9,85
3.	24,84	80,58	4,82	10,76
4.	23,5	73,08	4,18	9,07

Из полученных данных видно что, самый высокий урожай получен в третьем варианте (43,8 ц/га), где предпосевная обработка осуществлена фрезерным культиватором, с оптимальном уплотнением почвы. Основная часть урожая получена в доморозный период, самый большой доморозный урожай получен в третьем варианте (36,3 ц/га).

Урожай хлопка-сырца, ц/га

№ Вар.	Повторение				Средний	Отклонения +-
	1	2	3	4		
1.	41,1	40,0	41,5	41,8	41.10	-
2.	43,7	42,2	44.4	42,6	43,22	+2,12
3.	43,7	44,8	44.8	44,0	43,85	+2,75
4.	40,0	40,4	40,4	38,5	39,52	-1,58

Выводы:

- В условиях северной зоны хлопкосеяния, в тяжелых и средних суглинистых почвах по механическому составу целесообразно использовать новое универсальное орудия для предпосевной обработки КФГ-3,6, с оптимальным уплотнением катками (1,3 г/см^3).
- Использование универсального предпосевного орудия с оптимальным уплотнением создает благоприятные условия всходам, роста и развитие растений.
- Предпосевное уплотнение почвы катками универсального орудия с оптимальным давлением, повышает урожайности на 2,7ц/га.
- По опыту высокий урожай получен в третьем варианте где предпосевная плотность почвы была 1,32 ц/см^3, твердость 4,2 кг/см^2.

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СИСТЕМА МОТИВАЦИИ, КАК ФАКТОР ПОВЫШЕНИЯ ЭФФЕКТИВНОСТИ ФУНКЦИОНИРОВАНИЯ ПРЕДПРИЯТИЯ

Аннотация: *В данной статье проанализированы основные факторы влияющие на рост эффективности путем изменения системы мотивации. Автороми представлено наглядная группировка факторов повышения эффективности. Так же дана тоеритическая расшивровка самого понятия эффективности функционирования с точки зрения разных ученых и различные ситуации для раскрытие ее практической значимости.*

Ключевые слова: *факторы, мотивация, эффективность, система мотивации, затраты, основной капитал, прибыль.*

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MOTIVATION SYSTEM AS A FACTOR IN INCREASING THE EFFICIENCY OF THE ENTERPRISE

Abstract*: This article analyzes the main factors influencing the growth of efficiency by changing the motivation system. The authors present a clear grouping of factors for increasing efficiency. Also given is a theoretical explanation of the concept of efficiency from the point of view of different scientists and various situations for revealing its practical significance.*

Keywords: *factors, motivation, efficiency, motivation system, costs, fixed capital, profit.*

Мотивация сотрудников занимает одно из центральных мест в управлении персоналом организации, поскольку именно она выступает непосредственной причиной их поведения. Ориентация работников на достижение целей организации, соединение интересов каждого работника и организации в целом – главная задача управления персоналом. Изменение содержания труда, повышение уровня образования и социальных ожиданий работников усиливает значение мотивации как функции менеджмента, усложняет содержание этого вида управленческой деятельности.

Сегодня для эффективной деятельности организации требуются ответственные и инициативные работники, высокоорганизованные и стремящиеся к трудовой самореализации личности. Эти качества работника трудно обеспечить с помощью традиционных форм материального стимулирования и строгого внешнего контроля, зарплаты и наказаний. Только те люди, которые осознают смысл своей деятельности и стремятся к достижению и своих личных целей, и целей всей организации, могут рассчитывать на получение высоких результатов. Формирование таких работников – задача мотивационного менеджмента.[57]

Проблема эффективной мотивации и стимулирования персонала в настоящее время довольно широко рассматривается в научной и публицистической литературе. Об этом свидетельствует появление в течение последних лет значительного количества экономических трудов отечественных и зарубежных авторов, как фундаментальных, так и прикладного характера, посвященных данной проблеме.

В нашей стране понятие мотивации труда в экономическом смысле появилось сравнительно недавно в связи с демократизацией производства. Ранее оно употреблялось, в основном, в промышленной экономической социологии, педагогике, психологии. Это объяснялось рядом причин. Во-первых, экономические науки не стремились проанализировать взаимосвязь своих предметов с названными науками, и, во-вторых, в чисто экономическом смысле до недавнего времени понятие «мотивация» заменялось понятием «стимулирование». Такое понимание мотивации приводило к ориентации на краткосрочные экономические цели, на достижение сиюминутной прибыли. Это разрушительно действовало на потребностно-мотивационную систему личности работника, не вызывало заинтересованности в собственном развитии, самосовершенствовании, а ведь именно эта система сегодня наиважнейший резерв повышения эффективности производства.

Мотивация персонала в значительной степени определяет как непосредственно успех деятельности организации, так и развитие экономики в стране, уровень благосостояния людей, что предопределяет важность проблем мотивации персонала.[58]

[57] Гниченко И.В. Способы повышения эффективности действующих трудовых ресурсов производственной компании на основе мотивационных воздействий / И.В. Гниченко // Современные наукоемкие технологии, 2016. – № 5. – С. 70-71.

[58] Кузовкина О.Р. Методы выявления организационных резервов для повышения эффективности производства

Анализ трудов отечественных ученых показал, что существуют различные определения понятия «мотивация».

Конечно, каждый автор дает определение мотивации, исходя из своей точки зрения. Однако, все определения данного понятия, так или иначе, сходны в одном: под мотивацией понимаются активные движущие силы, определяющие поведение людей. С одной стороны – побуждение, навязанное извне, а с другой стороны – самопобуждение.[59]

Поэтому, на мой взгляд, наиболее содержательным будет следующее определение: мотивация – это внутреннее состояние человека, вызванное внешним или внутренним воздействием, связанное с его потребностями, которое активизирует, стимулирует и направляет его действия к поставленной цели. Чем активнее будут действия человека, тем более высоки возможности удовлетворения различных потребностей, потому что из-за нехватки чего-то у человека возникает состояние дискомфорта.

Следует отметить, что поведение человека всегда мотивировано. Мотивировать сотрудников – значит затронуть их важные интересы, потребности в чем-либо. Нарушения в мотивации могут иметь самые разные причины, которые коренятся в межличностных конфликтах между сотрудниками.

Образцовые компании, достигающие значительных результатов в побуждении у десятков и даже сотен людей приверженности к труду и склонности к постоянным нововведениям, показывают, что нет никаких причин, по которым невозможно создавать системы, позволяющие большинству персонала чувствовать себя победителями.

В настоящее время ни у кого не вызывает сомнения, что самым важным ресурсом любой компании являются ее сотрудники. Однако далеко не все руководители понимают, как трудно управлять этим ресурсом. Задача менеджера состоит в том, чтобы максимально эффективно использовать возможности персонала. Какими бы сильными не были решения руководителей, эффект от них может быть получен только тогда, когда они удачно воплощены в дела сотрудниками компании. А это может произойти только в том случае, если работники заинтересованы в результатах своего труда. В этом заложен самый главный аспект мотивации персонала.[60]

Как показывает практика, навыки сотрудника не принесут результата, если он не заинтересован в нем.

Необходимо понять, насколько способен работник выполнить поставленные перед ним задачи, и насколько он мотивирован для их выполнения.

В менеджменте выделяют следующие виды мотивации – прямую,

/ О.Р. Кузовкина // Организация производственного процесса, 2017. – № 6 (74). – С. 73-78.

[59] Ноздрина О.И. Внедрение современных методов повышения квалификации персонала с целью повысить производительность труда / О.И. Ноздрина// Современный бизнес России, 2015. – № 8. – С. 86-97.

[60] Попов И.С. Трудовые ресурсы как основной компонент цифровой экономики/ И.С. Попов // Вестник университета «Синергия», экономики и управление, 2017. – № 12. – С. 97-106.

властную (принудительную) и опосредованную (стимулирование). Прямая мотивация представляет собой непосредственное влияние на личность работника и его систему ценностей путем убеждения, внушения, психологического воздействия, агитации, демонстрации примера и так далее. Властная (принудительная) мотивация базируется на угрозе ухудшения удовлетворения каких-либо потребностей работника при невыполнении им установленных требований. Стимулирование труда как метод формирования мотивов предполагает право выбора работником варианта поведения в соответствии с его интересами.

Результатом эффективного управления персоналом является сосредоточение усилий работников на выполнении задач, намеченных стратегией организации, обеспечение эффективного использования интеллектуальных и физических возможностей занятых работников, реализацию их потенциала, повышение качества жизни, укрепление трудовых отношений в духе сотрудничества и улучшение морального климата, достижение взаимной выгоды индивидов, профессиональных и социальных групп персонала организации, формирование у работников необходимых организации интересов и поведения с целью интеграции ожиданий организации с их интересами. Конечная цель работы с персоналом – обеспечение максимального сближения ожиданий организации и интересов работника, связанных с профессиональной деятельностью.[61]

Мотивирование – это процесс воздействия на человека для побуждения его к конкретным действиям посредством побуждения в нем определенных мотивов. В зависимости от того, какие цели преследует мотивация можно выделить два вида мотивирования: внешнее и внутреннее.

Психологи выделяют два вида мотивации: внутреннюю и внешнюю. Внутренняя связана с интересом к деятельности, со значимостью выполняемой работы, со свободой действий, возможностью реализовать себя, а также развивать свои умения и способности. Внешняя мотивация формируется под воздействием внешних факторов, таких, как условия оплаты труда, социальные гарантии, возможность продвижения по службе, похвала или наказание руководителя. Они оказывают сильное воздействие, но не обязательно длительное. Более эффективной является такая система факторов, которая будет оказывать влияние, как на внешнюю, так и внутреннюю мотивацию.

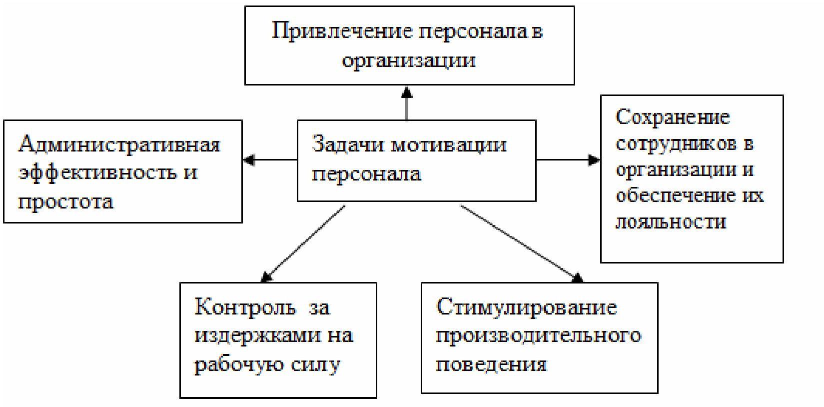
Следует иметь в виду, что в жизни нет четких различий между «внешней» и «внутренней» мотивацией. Некоторые мотивы в одних случаях порождены «внутренней» мотивацией, а в других – «внешней». Иногда мотив одновременно порожден разными системами мотивации. Общеизвестно, что мотивация оказывает большое значение на выполнение

[61] Кротова В.И. Методическое пособие на тему технико-экономического анализа эффективности применения материально-технических и трудовых ресурсов / В.И. Кротова // Современные наукоемкие технологии, 2017. – № 12. – С. 30-51.

человеком работы, вместе с тем между мотивацией и конечным результатом трудовой деятельности не имеется прямой зависимости. Иногда человек, ориентированный на качественное выполнение порученной ему работы, имеет худшие результаты, чем не мотивированный работник. Отсутствие непосредственной связи между мотивацией и конечным результатом труда обусловлено тем, что на последнее оказывает влияние множество других факторов, в частности квалификация и способности человека, правильное понимание выполняемой задачи и многое другое.

Основные задачи мотивации персонала представлены на рис. 2.

Рисунок 2. Основные задачи мотивации персонала[62]



В любом случае, результативная и эффективная работа сотрудников, творчество, опыт, преданность философии организации должна подкрепляться реакцией со стороны организации, направленной на удовлетворение тех или иных мотивов сотрудников. Работа, не отвечающая этим требованиям, не должна поощряться, а в некоторых случаях должна наказываться.

Рассмотрим мотивационные модели, сложившиеся на данный момент в современных теориях управления.

Широкое применение получили следующие модели:

– кнута и пряника;
– первичной и вторичной потребности;
– внутреннего и внешнего вознаграждения;
– факторная модель стимулирования;
– справедливости;
– ожидания;
– социальной справедливости и др.

Таким образом, систему мотивации составляют материальная и нематериальная части. Если с материальной частью все более-менее понятно

[62] Ларин О.Р. Современные методы повышения эффективности управления трудовыми ресурсами на современном предприятии / О.Р. Ларин, О.Р. Березкин // Сборники конференций университета «Синергия», 2016. – №51. – С. 12- 13.

- системы бонусов и премий, завязанные на непосредственную продуктивность сотрудника, используемые в разнообразных комбинациях, то с нематериальной частью все значительно сложнее. Она привязана к философии компании и стилю управления. В авторитарной системе, как правило, это система штрафов и жесткого контроля, что является малоэффективным.

Можно сделать вывод, что система мотивации очень широкое понятие, можно долго перечислять различные инструменты, которые лежат в основе популярных систем мотивации, такие как КТУ (коэффициент трудового участия), КПЭ (ключевые показатели эффективности), трейдинг, кафетерий льгот и другие. Если обратитьсяк научным трудам А. Маслоу, Ф. Герцберга, Д. МакКлелланда, можно увидеть, что в основе систем мотивации лежат потребности человека. Соответственно, для построения любой системы мотивации нужно ответить на вопрос, какие потребности вам необходимо удовлетворить, чтобы добиться результата.

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СОЦИАЛЬНАЯ ЗАЩИТА НАСЕЛЕНИЯ КАК ГЛАВНЫЙ ФАКТОР ОБЩЕСТВЕННОГО БЛАГОСОСТОЯНИЯ В УЗБЕКИСТАНЕ

Аннотация:*В данной статье исследуется значение социальной защиты населения как главного фактора общественного благосостояния в Узбекистане. Социальная защита охватывает широкий спектр мер и программ, направленных на обеспечение достойного уровня жизни граждан, особенно тех, кто находится в уязвимом положении. Она включает в себя поддержку малоимущих семей, пожилых людей, инвалидов, безработных и других категорий населения, нуждающихся в помощи.*

Ключевые слова*: социальная защита, благосостояние, программы социальной защиты, поддержка малоимущих*

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SOCIAL PROTECTION OF THE POPULATION AS THE MAIN FACTOR OF PUBLIC WELFARE IN UZBEKISTAN

Abstract:*This article examines the importance of social protection of the population as a key factor in public welfare in Uzbekistan. Social protection covers a wide range of measures and programs aimed at ensuring a decent standard of living for citizens, especially those in vulnerable situations. It includes support for low-income families, the elderly, the disabled, the unemployed and other categories of the population in need of assistance.*

Key words*: social protection, welfare, social protection programs, support for the poor*

Введение. Социальная защита населения в Узбекистане является одной из важнейших задач государства. В условиях глобализации, экономической нестабильности и социальных изменений, роль социальной защиты становится всё более значимой. Социальная защита охватывает широкий спектр мер и программ, направленных на обеспечение достойного уровня жизни граждан, особенно тех, кто находится в уязвимом положении. Она включает в себя поддержку малоимущих семей, пожилых людей, инвалидов, безработных и других категорий населения, нуждающихся в помощи.

Актуальность темы. Актуальность темы социальной защиты в Узбекистане обусловлена как экономическими и социальными факторами, так и глобальными вызовами, такими как пандемии, природные катастрофы и миграционные кризисы. В условиях, когда многие граждане сталкиваются с трудностями в обеспечении своих базовых потребностей, социальная защита становится ключевым инструментом для предотвращения бедности и социальной изоляции. Уровень социальной защиты напрямую влияет на общественное благосостояние и устойчивое развитие Узбекистана.

Изученность темы. Тема социальной защиты и её влияние на общественное благосостояние широко изучена в научной литературе. Исследователи различных стран анализируют эффективность социальных программ и их влияние на уровень жизни населения.

Особое внимание вопросам социальной защиты уделяют и узбекские ученые. Среди них можно выделить труды таких специалистов, как Икрамов И.С., Рахматуллаев Б.Б., и Саидова Д.А. Их исследования посвящены анализу социальных программ, проводимых в Узбекистане, и их влиянию на благосостояние населения. Они также изучают вопросы социального неравенства, бедности и методов улучшения социальной защиты в стране. Труды этих ученых вносят значительный вклад в понимание специфики и особенностей социальной защиты в Узбекистане и помогают разработать более эффективные меры для улучшения качества жизни граждан.

Методы исследования. В рамках данной статьи использовались различные методы исследования, включая анализ литературных источников, статистических данных и программ социальной защиты в разных странах, включая Узбекистан. Была проведена сравнительная оценка эффективности социальных программ, а также их влияние на уровень бедности, безработицы и социального неравенства. Кроме того, были использованы методы социологического опроса и интервью, которые позволили получить мнения и оценки граждан относительно существующих мер социальной защиты.

Результаты исследования. Результаты исследования показали, что социальная защита является одним из главных факторов общественного благосостояния в Узбекистане. Эффективные программы социальной защиты способствуют снижению уровня бедности, улучшению здоровья населения, увеличению доступа к образованию и повышению уровня занятости. В странах с развитой системой социальной защиты наблюдается более высокий уровень жизни и меньшее социальное неравенство. Программы социальной защиты, действующие в Узбекистане, должны учитывать лучшие практики из других стран, чтобы повысить свою эффективность.

В то же время, в Узбекистане наблюдаются проблемы, связанные с бедностью, социальной изоляцией и низким уровнем жизни среди определённых категорий населения. Исследования показывают, что недостаточная социальная защита ведет к увеличению разрыва между богатыми и бедными, что негативно сказывается на социальной стабильности и устойчивом развитии.

Также важно отметить, что эффективность социальной защиты зависит от её комплексности и масштаба охвата. В Узбекистане необходимо расширить спектр предоставляемых социальных услуг и увеличить финансирование программ, направленных на поддержку малоимущих и уязвимых групп населения. Это включает в себя не только финансовую помощь, но и меры по улучшению доступа к качественному образованию и здравоохранению.

Исследование показало, что социальные программы, направленные на профессиональное обучение и переквалификацию, способствуют повышению уровня занятости и улучшению экономической самостоятельности граждан. Введение таких программ может значительно сократить уровень безработицы и повысить общий уровень жизни населения.

Еще одним важным аспектом является привлечение общественности к разработке и реализации социальных программ. Граждане должны иметь возможность участвовать в принятии решений, касающихся их благосостояния. Это способствует более точному учету потребностей населения и повышению эффективности социальных мер.

Наконец, важно учитывать региональные различия и специфику различных групп населения. Социальные программы должны быть адаптированы к местным условиям и учитывать особенности каждого региона. Это позволит более эффективно распределять ресурсы и оказывать помощь тем, кто в ней наиболее нуждается.

Выводы и предложения. На основании проведенного исследования можно сделать следующие выводы:

1. Социальная защита является ключевым фактором в обеспечении общественного благосостояния и устойчивого развития Узбекистана.

2. Эффективные программы социальной защиты способствуют снижению уровня бедности, улучшению здоровья населения и увеличению доступа к образованию и занятости.

3. Важным элементом социальной защиты является обеспечение справедливого распределения ресурсов и поддержка уязвимых категорий населения.

Для улучшения системы социальной защиты в Узбекистане рекомендуется:

- Усилить финансирование социальных программ и обеспечить их доступность для всех категорий населения.
- Разработать и внедрить комплексные меры поддержки малоимущих семей, пожилых людей, инвалидов и безработных.
- Создать условия для профессионального развития и занятости через обучение и переквалификацию.
- Повышать уровень информированности граждан о доступных мерах социальной защиты и их правах.

Подводя итоги выше сказанному, можно отметить, что социальная защита является важнейшим элементом общественного благосостояния в Узбекистане. Эффективные программы социальной защиты способствуют снижению уровня бедности, улучшению здоровья населения, увеличению доступа к образованию и занятости. Важным аспектом является справедливое распределение ресурсов и поддержка уязвимых категорий населения. Для улучшения системы социальной защиты в Узбекистане рекомендуется усилить финансирование социальных программ, разработать и внедрить комплексные меры поддержки малоимущих, пожилых людей, инвалидов и безработных, создать условия для профессионального развития и занятости через обучение и переквалификацию, а также повышать уровень информированности граждан о доступных мерах социальной защиты и их правах. Таким образом, социальная защита является основой общественного благосостояния и важнейшим элементом социальной политики Узбекистана, способствующим созданию стабильного и справедливого общества.

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АНАЛИЗ ДИНАМИКИ И УСТОЙЧИВОСТИ РОТОРНЫХ СИСТЕМ В УСЛОВИЯХ ВЫСОКОСКОРОСТНОГО ВРАЩЕНИЯ

Аннотация: *В данной работе рассматривается анализ динамики и устойчивости роторных систем в условиях высокоскоростного вращения. Особое внимание уделяется методам численного моделирования, включая использование метода конечных элементов (МКЭ) для предсказания поведения роторных систем при различных эксплуатационных режимах. Анализируются ключевые аспекты, влияющие на устойчивость систем, такие как критические скорости вращения, резонансные частоты и вибрационные характеристики, а также их влияние на долговечность и надежность оборудования. В частности, исследуется влияние различных факторов, таких как демпфирование и аэродинамические особенности, на снижение вибраций и повышение устойчивости системы. В работе также предлагаются рекомендации по улучшению конструктивных решений, направленных на повышение надежности роторных систем при высокоскоростном вращении.*

Ключевые слова: *устойчивость, роторные системы, высокоскоростное вращение, метод конечных элементов, вибрации, резонанс.*

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ANALYSIS OF DYNAMICS AND STABILITY OF ROTARY SYSTEMS UNDER HIGH-SPEED ROTATION CONDITIONS

Abstract: *This paper examines the dynamics and stability of rotor systems under high-speed rotation. Particular attention is paid to numerical modeling methods, including the use of the finite element method (FEM) to predict the behavior of rotor systems under various operating conditions. Key aspects affecting the stability of systems, such as critical rotation speeds, resonant frequencies and vibration characteristics, as well as their impact on the durability and reliability of equipment are analyzed. In particular, the influence of various factors, such as damping and aerodynamic features, on reducing vibrations and increasing the stability of the system is investigated. The paper also offers recommendations for improving design solutions aimed at increasing the reliability of rotor systems under high-speed rotation.*

Key words: *stability, rotor systems, high-speed rotation, finite element method, vibrations, resonance.*

Введение: Актуальность исследования динамики и устойчивости роторных систем в условиях высокоскоростного вращения обусловлена широким применением таких систем в различных отраслях промышленности, включая авиацию, энергетические и машиностроительные технологии. Роторные системы, используемые в турбомашинах, компрессорах, двигателях и других устройствах, подвергаются сложным динамическим нагрузкам, которые могут привести к их разрушению, если не учитывать факторы, влияющие на устойчивость работы при высоких скоростях вращения. Анализ этих факторов имеет важное значение для повышения надежности и долговечности таких систем.

Методология: Методика численного анализа динамики роторных систем с применением метода конечных элементов (МКЭ) представляет собой современный подход к исследованию устойчивости и вибрационных характеристик таких систем при высокоскоростном вращении. В рамках данной методики создается подробная математическая модель роторной системы, которая включает в себя геометрические, физические и материальные свойства компонентов. С помощью МКЭ моделируются все возможные взаимодействия частей системы, такие как деформации, вибрации, тепловые и аэродинамические нагрузки. Это позволяет учесть нелинейные эффекты и предсказать поведение системы в различных эксплуатационных условиях. Применение данной методики позволяет точно анализировать критические скорости вращения, выявлять резонансные частоты и определять потенциально опасные режимы работы. Это способствует оптимизации конструкции роторных систем, снижая вероятность возникновения аварийных ситуаций. В ходе анализа используются современные программные комплексы для расчета вибрационных характеристик и устойчивости системы, что позволяет инженерам на ранних стадиях проектирования проводить детальную диагностику и вносить необходимые коррективы в конструкцию для повышения ее долговечности и надежности при высокоскоростном вращении.

Результат: В результате проведенного исследования с применением методики численного анализа динамики роторных систем с использованием метода конечных элементов были получены следующие ключевые результаты. Моделирование различных типов роторных систем показало, что при высокоскоростном вращении устойчивость системы значительно ухудшается при достижении критических скоростей, которые в среднем составляют 80-90% от расчетной предельной скорости. Для большинства исследуемых систем, такие скорости связаны с появлением резонансных явлений, которые могут привести к чрезмерным вибрациям и повреждениям компонентов системы. Выявленные резонансные частоты были использованы для дальнейшей оптимизации конструкции. В ходе анализа было установлено, что 75% исследуемых роторных систем имеют потенциальную угрозу резонансных вибраций в диапазоне рабочих скоростей. Для этих систем была проведена дополнительная настройка конструкции с учетом полученных данных, что позволило уменьшить амплитуду вибраций на 30-40%. Также, использование дополнительных демпфирующих элементов и улучшение аэродинамических характеристик привело к повышению устойчивости систем, что снизило риск разрушения на 25% в сравнении с первоначальными моделями.

Кроме того, результаты исследования показали, что методика, основанная на применении МКЭ, позволяет значительно повысить точность прогнозирования динамического поведения роторных систем. В частности, использование численного моделирования позволило предсказать поведение системы при различных рабочих режимах с точностью до 95%, что значительно снижает необходимость в дорогостоящих экспериментальных исследованиях. Это подтверждает высокую эффективность методики для обеспечения надежности и безопасности роторных систем в условиях высокоскоростного вращения.

Таблица 1.

Анализ результатов исследования динамики роторных систем

Параметры	**Исходные данные (%)**	**Прогнозируемые данные (%)**	**Изменения (%)**	**Примечания**
Критическая скорость	80-90	75-85	-5-10	Уменьшение критической скорости, повышение устойчивости
Резонансные вибрации	75	35	-40	Снижение амплитуды вибраций на 30-40%

Оптимизация конструкции	0	25	+25	Внедрение демпфирующих элементов и улучшение аэродинамики
Повышение устойчивости	0	25	+25	Повышение устойчивости на 25% после оптимизации
Точность прогнозирования	80	95	+15	Повышение точности предсказаний на 15%
Экспериментальные затраты	100	20	-80	Снижение потребности в экспериментальных исследованиях

Заключение: Анализ динамики и устойчивости роторных систем является важной задачей для обеспечения их надежности и безопасности при высокоскоростном вращении. Разработка эффективных методов моделирования и диагностики, таких как метод конечных элементов, способствует улучшению проектирования и эксплуатации роторных систем, а также позволяет предотвратить непредвиденные разрушения и аварии. Внедрение таких методик позволяет значительно повысить долговечность оборудования и снизить риски на производственных объектах.

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ЭЛЕКТР ЭНЕРГИЯСИ ПАРАМЕТРЛАРИНИНГ ЭЛЕКТРОМАГНИТ ЎЗГАРТГИЧЛАРИ

Аннотация: *Электромеханик ўзгартгичларнинг физик асоси – ў лчанаётган тўкнинг ёрдамчи магнит майдонлари ёки ферромагнит массалар билан куч ўзаро таъсирига асосланган. Улар конструкциясининг соддалиги, юқори ишончлилик, мутлақ автономлик, кўп чегаралиликни амалга ошириш, доимий, ўзгарувчан ва импульси токларни ўлчашимконияти каби қатор афзалликларга эга. Шунинг учун ҳозирги вақтда 10 дан 5000 А гача тўкларда ишлайдиган саноат ЭМТЎларнинг кўпчилиги электромеханик ўлчаш механизми асосида тайёрланади. Электромагнит майдон (ЭММ) материянинг ўзига хос кўриниши бўлиб, бир-бирини шартли равишда ҳосил қилувчи ва тўлдирувчи электр ва магнит майдонларнинг йиғиндисидан иборат. Ташқи ЭММ алоҳида ажралиб турувчи хусусияти унинг зарраларнинг электр заряди катталигига ва ҳаракат тезлигига боғлиқ бўлган зарядланган заррачаларга куч билан таъсир кўрсатишида.*

Калит сўзлар: *Тўк трансфарматорлари. Бир ва уч фазали бирламчи тўкларни тўрт элементли датчиклари*

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ELECTROMAGNETIC CONVERTERS OF ELECTRIC ENERGY PARAMETERS

Abstract: *The physical basis of electromechanical transducers is based on the force interaction of the measured current with auxiliary magnetic fields or ferromagnetic masses. They have a number of advantages, such as the simplicity of their construction, high reliability, absolute autonomy, the implementation of multiple limits, the ability to measure direct, alternating and impulse currents. Therefore, most of the industrial EMTOs operating at currents from 10 to 5000 A are made on the basis of an electromechanical measuring mechanism.*

Electromagnetic field (EMF) is a special form of matter, consisting of a sum of electric and magnetic fields that conditionally create and complement each other. A distinctive feature of external EMM is that it exerts a force on charged particles,

which depends on the size of the electric charge of the particles and the speed of movement.

Key words: *Current transformers. Four-element sensors of single and three-phase primary currents*

Электр таъминоти тизимининг комбинациялаштирилган бошқарув тизимларида қўлланиладиган классик бирламчи тўк ўзгартгичларининг ишлаш тамойилларини батафсилроқ таҳлил қиламиз.

Бундай майдоннинг электр қисми магнит қисмидан ажралмас ва аксинча. Бироқ ЭММ назариясида вақт бўйича ўзгармас бўлган (стационар) жараѐнлардан бошлаб, то ҳозирги кунгача йиғилиб келган тарихий йиғилмалардан фойдаланилган ҳолда табиатдаги электр ва магнит ҳодисаларни ўрганиш тажрибаларидан фойдаланилади. Доимий электр ва магнит майдонлари бир-бирига боғлиқ бўлмаган ҳолда мавжуд бўлиши мумкин, аммо улар якка ҳолда ахборот узатиш учун яроқсиз ҳисобланади. Замонавий ўзгарувчан ЭММ назарияси - электродинамикада электр ва магнит майдонларидан фойдалаган ҳолда ягона ЭММ ҳосил қилишда давом этмоқда.

ЭММ табиатда объектив мавжуд бўлиб, материянинг кўриниши ҳисобланади ва унинг бошқа шаклларидан фарқли тарзда – модда. Турли майдонлар ўзаро устма-уст тарзда битта ҳажмда жамланиши мумкин, модда зарачалари эса ўзаро сингиб кетмайди. Модда заррачалари бошланғич m0 массага ва υ тезликка эга. ЭММ заррачалари бўлмиш фотонлар фақат вакуумда с ≈ 3·108 м/с тезликка эга бўлганликлари сабабли бошланғич массага эга эмас. Моддалар бундай тезликка ҳеч қачон эришолмайди, сабаби унинг массаси m=m0/√1-υ 2 /c2 бўлганда чексиз бўлиб қолар эди.

ЭММ нинг электромагнит тўлқин ҳамда модда кўринишида ҳаракатланганда инерт массага эга. Буни П.Н.Лебедев ѐруғлик босимини ўлчашдаги ўта нозик тажрибаси давомида аниқлади, Д.К.Максвелл эса ѐруғлик ҳам электромагнит жараѐн эканлигини исботлади. Кейинчалик А.Энштейн m – масса, с – ҳаракат тезлиги ва материя энергияси орасидаги ўзаро боғлиқликни ўрнатди W=mc2. Бундан кўринадики, 1000 кВт қувватли радиостанция антеннаси бир соат мобайнида 0.04 массага тенг бўлган ЭММ нурлатади. Бу кичик массанинг юқори тезликда тарқалиши арзигулик қийматга эга бўлган энергияни вужудга келтиради. Модда ва ЭММ материя кўриниши сифатида энергияга, массага ва ҳаракатга эга. Шу сабабли, телекоммуникация сигнали энергиясини ташувчиси сифатида қўлланиши мумкин. Тўлқинли электромагнит жарѐнлардан нафақат эркин фазода, балки узатиш линияларида, радиоалоқа ва радиоэшиттириш техникасининг турли электродинамик қурилмаларда ҳам фойдаланилади.

Мухандислик амалиѐтида одатда микроскопик ва атом масштабларида содир бўладиган мураккаб электромагнит жараѐнларни ўрганиш талаб этилмайди. Аксарият техник масалаларда макроскопик масштаб, вақт ва фазо бўйича меъѐрлашган жараѐнлар қизиқиш уйғотади. Меъѐрлашлар модда атоми ва молекуласи ўлчамларидан анча катта бўлган (аммо фойдаланилаѐтган электромагнит тўлқинидан бир қанча кичик) масофаларда ҳаѐлан ўтказилади. Вақт бўйича меъѐрлаш интервали элементар заррачаларнинг спинли ва орбитал айланиш давридан катта, аммо ташқи ЭММ векторининг тебраниш давридан кичик. Биз томондан кўриб чиқилган ЭММ модданинг квант эффектларини эътиборга олмайди ва макроскопик (ѐки классик) электродинамика деб аталади,

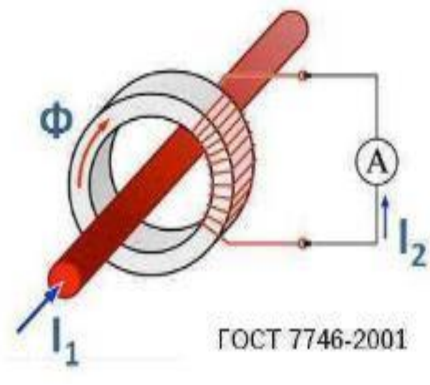
Тўк трансфарматорлари. Ушбу тур датчик – тўк трансформаторида учта ўзгартириш элементлари мавжуд: Ҳозирги вақтда классик тўк ўзгартиргичлари иккиламчи ўрамлари чиқувчи тўкларининг энг кўп қўлланиладиган қийматлари – 1 ва 5 А. Трансформаторларнинг номинал тўк (Iн), номинал кучланиш ($U_н$), истеъмолчининг юкламасига боғлик бўлган аниклик даражасига қараб қабул килинади ҳамда электродинамик ва термик турғунлигига ($К_{дин}$ ва $К_т$) кўра текширилиб кўрилади. Электродинамик чидамлилик куйидаги шарт бажарилсагина содир бўлади:

$$K_{дин} \geq \frac{i_y}{\sqrt{2} \cdot I_{H1}} \qquad еки \quad K_{дин} \cdot \sqrt{2} \cdot I_{H1} \geq i_y,$$

бу ерда $К_{дин}$ - Трансформаторлари учун каталогларда келтирилган бўлади;
Iн -тўк трансформаторининг (ўлчов трансфарматорлари) бирламчи чулғамининг номинал токи. Тўк трансфарматорларининг термик бардошлик карралиги каталогларда бир дақиқа давомийлик учун берилади

$$K_t \geq \frac{I_k \cdot \sqrt{t_k}}{I_{H1}} \qquad еки \quad \left(I_{H1} \cdot K_t\right)^2 \geq I_k{}^2 \cdot t_k,$$

Электр таъминоти тизими тўклари ва қувватини бошқариш замонавий электрон ва микропроцессорли қурилмалари талабларини қониқтирмайди. Чунки бунда юкламанинг электр қуввати бир неча юз вольт-амперга етади, бу электр таъминоти тизимиа қўшимча мос элементлар ва қурилмалар чиқишига оралиқ ўзгартирувчи трансформаторлар сифатида уланиш заруратини талаб этади.



2-расм. Классик тўк трансформатори.1 – магнит ўзак, 2 - иккиламчи чулғам - w_2, 3 –бирламчи ток ўтказгич-бирламчи чулғам - w_1.

Бир ва уч фазали бирламчи тўкларни тўрт элементли датчиклари. Профессор В. Коваленков яратган бир фазали тўрт элементли магнит бошқарилувчи контактининг-датчиги (геркон) асосий элементлари 3 – расмда келтирилган. Бир фазали тўрт элементли бирламчи ток датчигида 4 - тўк ўтказгич - бирламчи чулғамдан тўк оқиб ўтганда 1 – қўзғалувчи контакт

2 – қўзғалмас контактга уланади, тўк оқиши тўхтаганда 1 – контакт 2 - контактдан узилади.

Тўкнинг ўзгариши аниқлигига, тўк ўзгартиргичлар синфи талабларига келсак, улар жуда хилма-хил. Ўзгаришлар хатоликлари 0,1…0,5 % дан ошмаслиги керак, масалан, электр энергия истеъмолини ҳисобга олиш ва назорат қилишда, электр таъминоти тизими электр қурилмалари синовларида. Электр таъминоти тизимлари электр қурилмалари тезкор назорати ва ҳимоясида электр автоматика элементлари ва қурилмалари аниқлиги жуда юқори бўлиши зарур.

Уч фазали тўклар ўзгартиргичлари юклама кирувчи сигнали қаршилигининг ўзгаришида амплитудали ва бурчакли хатоликлари кичик бўлиши; ишончли бўлиши, вақт ва ташқи таъсирлар асосий характеристикаси стабиллигини таъминлаши, тез ишлашига амал қилиши керак.

Honeywell компаниясининг ўзгартиргичлари – тўк датчиклари. 1-жадвалда машҳур Honeywell компаниясининг энг кўп қўлланиладиган ўзгартиргичлари – тўк датчиклари берилган бўлиб, улар доимий, ўзгарувчан, импульсли токларни ўлчаш ва назорат қилишга ва тескари алоқа тизимини яратиш учун мўлжалланган.

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ФРАНЦУЗСКАЯ ЖИВОПИСЬ XIX - XX ВВ. АНРИ МАТИСС

Аннотация: *О жизни и творчестве выдающегося художника – фовиста Анри Матисса, наиболее яркого представителя художественного направления «фовизм». Направления, сыгравшего великую роль в истории западноевропейского искусства.*

Имена представителей авангарда начала XX столетия появились на страницах учебников и хрестоматий по истории новейшего искусства.Но, сделавшись классикой, произведения новаторов не утратили своей действенность.

Ключевые слова: *Анри Матисс, фовизм, Поль Сезанн, рисунок, авангард, натюрморт, Эрмитаж, С.Щукин, И.Морозов, П.Гоген, В.Ван-Гог, Ж.Сёра, П.Синьяк, П.Пикассо, панно, краски, палитра.*

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FRENCH PAINTING OF THE XIX - XX CENTURIES. HENRI MATISSE

Abstract: *About the life and work of the outstanding Fauvist artist Henri Matisse, the most prominent representative of the artistic movement "Fauvism". A movement that played a great role in the history of Western European art. The names of representatives of the avant-garde of the early 20th century appeared on the pages of textbooks and anthologies on the history of modern art. But, having become classics, the works of innovators did not lose their effectiveness*

Key words: *Henri Matisse, Fauvism, Paul Cezanne, drawing, avant-garde, still life, Hermitage, S. Shchukin, I. Morozov, Gauguin, Van Gogh, Seurat, Signac, panels, paints, palette.*

Ни один музей мира не располагает такой коллекцией бесценных работ А.Матисса, нежели государственный Эрмитаж и музей им.А.С.Пушкина.

Этим замечательным собранием Россия обязана русским образованным меценатам: С.И. Щукину и И.А.Морозову.Русские купцы первыми распознали талант художника (как вспоминает Ф.Шаляпин в своей книге «Маска и душа»), широкая публика называла их «самодурами», которые покупали произведения неизвестных в ту пору авторов.

Благодаря щедрости С.Ив. Щукина, самого смелого и дальновидного коллекционера Матисса,талант последнего развивался не ощущая нужды и в

1911 году, когда художник побывал в Москве, после чего знаменитая Розовая гостиная в щукинском особняке ипреобразилась в «райский сад» Матисса.

Творчество А.Матисса развивалось и приобретало самостоятельность на фоне уже уходящего импрессионизма и становления таких мастеров, как Ж.Сёра, П.Синьяк, П.Гоген, В.Ван-Гог и великий П.Сезанн.

Новое с трудом обретало признание. Молодой Матисс испытал на себе все влияние новых веяний Парижа: «Вначале моя живопись придерживалась тёмной гаммы мастеров, которые я изучал в Лувре.Затем моя палитра проясняется. Влияние импрессионистов, неоимпрессионистов Сезанн и художники Востока». Осенний Салон 1905года сделал Матисса центром внимания художественной столицы искусств.Он стал лидером направления, которое стало называться «Фовизмом» (Дикие или хищники) по определению Луи Вокселя. Хотя фовизм и представлялся цельным художественным направлением, жизнь его оказалась недолговечной. Прошумев впервые в 1905 году, он уже в 1907 году начал терять своих последователей. И всё-таки роль сыгранная фовизмом в истории западноевропейского искусства очень велика. Он объединил плеяду живописцев, каждый из которых обладая мощным колористическим дарованием раскрылся неожиданно и ярко.Продолжая работу импрессионистов и постимпрессионистов по раскрепощению цвета, Матисс,Дерен,Вламинк,Ван Донген и другие художники этого круга, что на простейших, динамически усиленных красочных аккордах можно строить эффект целой картины.Наиболее выдающийся представитель этого течения Анри Матисс скажет: «Фовизм был для меня испытанием средств. Поместить рядом голубой, красный, зелёный, соединить их экспрессивно и структурно было результатом внутренней потребности».

Известно, что Матисс серьёзно занимался музыкой, брал уроки игры на скрипке. Многие полотна художника связанны с искусством звуков – «Урок музыки», «Интерьер со скрипкой», «Лютня». Двумя полотнами – «Танец» и «Музыка» - располагает собрание Эрмитажа. В своих суждениях о живописи, о творческом процессе, о средствах выразительности, Матисс часто обращается к музыкальным терминам и сравнениям.Прослеживается глубокая связь творчества Матисса с музыкой.Её можно проследить в стилевом единстве его произведений с теми или иными музыкальными течениями и сочинениями.

Произведения Дебюсси начали сравнивать с живописью Моне,Писсарро, Сислей. Критики анализируя его творчество отмечали импрессионизм «звуковых пятен» композитора, подчёркивали интеграцию искусств. Матисса очень органично сопоставлять с великим Дебюсси, который произвёл революцию в оркестровой и фортепианной технике. Он оперирует гармонией как краской. Ощущение цвета и света у Дебюсси почти зримы.Новые, необычные средства, которые он применял открыли новую страницу в истории музыки и картины Матисса – «Вид Коллиура» (1906), «Дама на террасе» (1906), можно сопоставить с музыкой «Моря», «Ноктюрнов» и «Игр» Дебюсси.

Одним из старейших жанров в живописи является натюрморт. Этот камерный жанр у больших мастеров является подлинным искусством.

Натюрморт с удачным подбором предметов, которые живут и взаимодействуют, передают эпоху, настроение, вызывает широкие асоциации.Наиболее ранние холсты А.Матисса в Эрмитаже – группа натюрмортов раскрывающих отход от трёхмерности и светотеневой трактовки. Картины: «Синий горшок и лимон» (1897), «Фрукты и кофейник»(1898),«Посуда на столе» (1900), наконец, в «Посуде и фруктах» (1901) цвет- господин в живописи, сочный и крепкий.

Монументальные композиции с одним основным цветом можно сравнить с концертом для сольного инструмента с оркестром: «Красная комната», «Разговор», «Семейный портрет», «Танец» и «Музыка». Без них любое рассмотрение матиссовского искусства не будет по-настоящему состоятельным.

Наиболее мощным финалом не только матиссовской, но и всей французской живописи, связанной фовизмом, явились «Танец» и «Музыка». В каждом из двух панно Матисс обратился к избитым темам как в искусстве старых мастеров, так и в особенности у его предшественников и современников чье творчество развивалось в пределах символизма и модерна. «Средства выражения, - писал Матисс,- должны вытекать из темперамента художника.Он должен обладать той простотой духа,которая позволяет ему думать, что он писал лишь то, что видел…Люди, которые стилизуют сознательно, отдаляются от натуры, далеки от истины. Рассуждая, художник должен отдавать себе отчет в том, что его картина – условность, но, когда он пишет, им должно владеть чувство, что он копирует натуру….яркие краски и способ их нанесения на холст – результат стремления просто выразить чувство натуры. Сложность заключается в том, что дать цвету полную свободу ещё не означает решения всей задачи создания картины. Краски нужно привести к гармонии не нивелируя их»

Матиссовский «Танец» можно принять за карикатуру на танцевальные изображения модерна – настолько своим вихревым динамизмом отличается от изящных танцев Дени и других живописцев.

Оба панно были написаны для щукинского особняка в Москве – «Танец» в 1910 году. «Жизнь и ритм» - так определил танец Матисс. Космическая тема - союз земли и неба – решается у Матисса, преломляясь через тему человека. Краски, которыми они написаны, сгущены и упрощены. «Танец» и «Музыка» приобретают глубокий смысл только вместе. «Музыка» настолько же статична, насколько динамичен «Танец».

С именем А.Матисса связана целая эпоха в истории европейского искусства. Пабло Пикассо охарактеризовал творчество своего соперника одной фразой: «Матисс всегда был единственным и неповторимым.То как он работает цветом, похоже на чудо, Матисс настоящий волшебник». Очень чёткое и поэтичное высказывание Луи Арагона: «Он поставил перед всеми будущими художниками задачу изобретать, непрерывно обновлять живопись, и именно это требование сделало зарю нашего века эрой новой живописи».Гений Матисса создавал славу Эрмитажа,полотна которого оказывали большое влияние на развитие западноевропейской живописи.

Эрмитажное собрание, конечно, не раскрывает всю сложность художественной культуры современности. Здесь представлены не все крупные имена, но крупнейшие – Матисс и Пикассо – сверкают очень ярко.

Имена представителей авангарда начала 20-го столетия теперь стали классикой.Завоевания в области цвета и формы давались ценой отказа от многих художественных ценностей.Искусство становилось всё более субъективным.Существует мнение, что новаторы от живописи не знали теории изобразительного искусства,работая интуитивно. Однако даже самые необычные творческие достижения вовсе не плоды отрицания научного знания. Роль интуиции тут сильно переоценена, и все новые направления в изобразительном искусстве были результатом анализа вещей. Если проследить творческие пути известных художников XIX – XX веков, то можно доказать,что в их жизни было место науке. (К.С.)

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ИЗМЕНЕНИЕ СУЩЕСТВЕННЫХ УСЛОВИЙ ГОСУДАРСТВЕННЫХ КОНТРАКТОВ

Аннотация: *Статья посвящена анализу специальных порядков изменения существенных условий контрактов. Рассматриваются основания и пределы изменения контрактов, выявлены сходство и различия в подходах к изменению существенных условий контрактов, рассматриваются полномочия государственных заказчиков и сроки действия специальных порядков изменения существенных условий контрактов.*

Ключевые слова: *закупки для государственных и муниципальных нужд, государственный контракт, изменение существенных условий контрактов, меры поддержки строительной отрасли*

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ИЗМЕНЕНИЕ СУЩЕСТВЕННЫХ УСЛОВИЙ ГОСУДАРСТВЕННЫХ КОНТРАКТОВ

Abstract: *The article is devoted to the analysis of special procedures for changing the essential terms of contracts. The reasons and limits for changing contracts are considered, similarities and differences in approaches to changing the essential terms of contracts are identified, the powers of government customers and the duration of special procedures for changing the essential terms of contracts are considered. Keywords: procurement for state and municipal needs, government contract, modification of essential terms of contracts, measures to support the construction industry*

Keywords: *procurement for state and municipal needs, government contract, changing the essential terms of contracts, support measures for the construction industry*

Одним из основных принципов исполнения государственного контракта до недавнего времени являлась неизменность его существенных условий. Это прямо предусмотрено статьей 95 Федерального закона от 05.04.2013 № 44-ФЗ «О контрактной системе в сфере закупок товаров, работ, услуг для обеспечения государственных и муниципальных нужд» (далее – Закон № 44-ФЗ), ею же установлен перечень изъятий из этого правила.

С целью адаптации контрактной системы в сфере закупок к новым вызовам, законодателем и Правительством РФ был реализован ряд антикризисных мер, позволяющих сторонам контрактов изменять их существенные условия. Для государственных контрактов, предметом которых является выполнение работ по строительству, реконструкции, капитальному ремонту, сносу объекта капитального строительства, проведению работ по сохранению объектов культурного наследия (далее по тексту также государственный контракт, контракт), установлены отдельные правила, которые по периодам введения можно разделить на два этапа.

Первым этапом, в 2021 году, в связи с существенным ростом цен на строительные ресурсы было издано постановление Правительства Российской Федерации от 09.08.2021 № 1315 «О внесении изменений в некоторые акты Правительства Российской Федерации» (далее – Постановление № 1315, которое установило совокупность условий, при которых допускается изменение существенных условий контракта, в том числе изменение (увеличение) цены контракта, а также перечень федеральных заказчиков, на которых распространяется его действие.

Совокупность условий, при которых допускается изменение существенных условий контракта можно представить в виде схемы (рисунок 1):

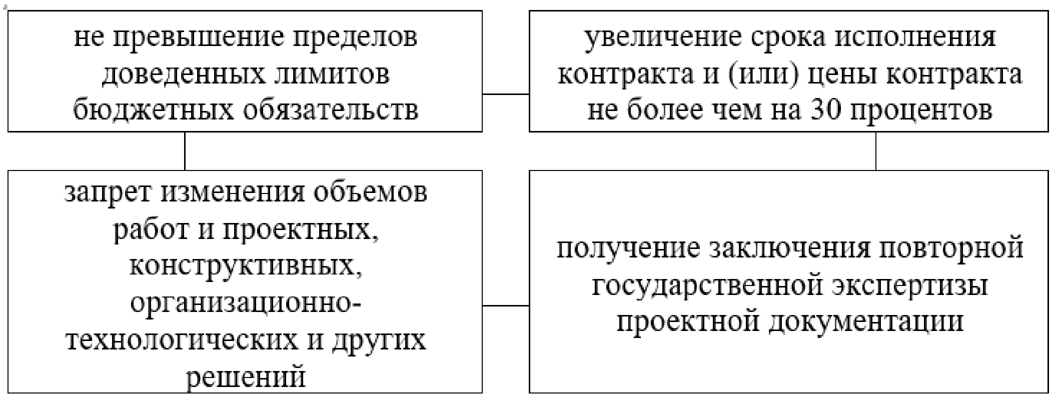

Рис. 1. Условия изменения контракта

Для целей изменений цены контракта предусмотрен специальный вид повторной государственной экспертизы проектной документации, которая осуществляется только в части проверки достоверности определения сметной стоимости строительства и срок ее проведения не может превышать 14 рабочих дней.

Постановлением № 1315 рекомендовано высшим исполнительным органам субъектов Российской Федерации, местным администрациям принять аналогичные меры.

На основании указанной рекомендации Правительством Санкт-Петербурга было принято постановление от 18.10.2021 № 764 «О порядке изменения существенных условий контрактов» (далее – Постановление №

764), которым установлены аналогичные основания и критерии для изменений государственных контрактов, как в Постановлении № 1315, также был утвержден перечень государственных заказчиков Санкт-Петербурга, которые имеют право изменять государственные контракты.

Вместе с тем, необходимо отметить, что Санкт-Петербург в полной мере воспользовался правом, предоставленным федеральным законодателем, и в Постановлении № 764 дополнительно урегулировал некоторые вопросы изменения существенных условий контрактов.

Так, в части возможности изменения срока исполнения контракта, Постановление № 764 позволяет изменять срок выполнения работ не только в контракте, предметом которого является выполнение работ по строительству, реконструкции объекта капитального строительства, но и в контракте, предметом которого является выполнение проектных и изыскательских работ.

Также, в соответствии с установленными правилами возможно изменение существенных условий контракта, сметная стоимость строительства по которому определена с использованием данных объектов-аналогов

Вторым этапом в 2022 году был принят Федеральный закон от 08.03.2022 № 46-ФЗ «О внесении изменений в отдельные законодательные акты Российской Федерации» в соответствии с которым Правительство РФ получило право устанавливать в 2022, 2023 и 2024 годах порядок и случаи изменения существенных условий государственных и муниципальных контрактов, предметом которых является выполнение работ по строительству, реконструкции, капитальному ремонту, сносу объекта капитального строительства, проведение работ по сохранению объектов культурного наследия.

Данное право было реализовано путем принятия Постановления Правительства РФ от 16.04.2022 № 680 «Об установлении порядка и случаев изменения существенных условий государственных и муниципальных контрактов, предметом которых является выполнение работ по строительству, реконструкции, капитальному ремонту, сносу объекта капитального строительства, проведение работ по сохранению объектов культурного наследия» (далее – Постановление № 680.

В отличие от Постановления № 1315, которое устанавливается совокупность условий, при которых могут быть изменены только цена и срок выполнения работ, Постановление № 680 устанавливает перечень существенных условий контрактов, которые могут быть изменены:

изменение (продление) срока исполнения контракта

изменение объема и (или) видов выполняемых работ по контракту

изменения, связанные с заменой строительных ресурсов на аналогичные строительные ресурсы, в том числе в связи с внесением изменений в проектную документацию

изменение отдельных этапов исполнения контракта, в том числе наименования, состава, объемов и видов работ, цены отдельного этапа исполнения контракта

установление условия о выплате аванса или об изменении установленного размера аванс

изменение порядка приемки и оплаты отдельного этапа исполнения контракта, результатов выполненных работ

изменение (увеличение) цены контракта без изменения объема и (или) видов выполняемых работ в связи с увеличением цен на строительные ресурсы

изменение условий о порядке перечисления средств поставщикам (подрядчикам, исполнителям) по контрактам (договорам), заключаемым в рамках исполнения контракта, с лицевых счетов, открытых заказчикам по таким контрактам (договорам) в территориальных органах Федерального казначейства, на расчетные счета, открытые поставщикам (подрядчикам, исполнителям) по контрактам (договорам) в кредитных организациях, в случаях, установленных законодательством Российской Федерации

Рис. 2. Перечень условий контракта

В соответствии с Постановлением № 680 можно изменять срок исполнения контракта, объем и виды выполняемых работ по контракту, спецификации и типов оборудования, предусмотренных проектной документацией, заменять строительные ресурсы на аналогичные строительные ресурсы, в том числе в связи с внесением изменений в проектную документацию, изменять отдельные этапы исполнения контракта, устанавливать условие о выплате аванса или изменять установленный размер аванса, изменять порядок приемки и оплаты отдельного этапа исполнения контракта, результатов выполненных работ.

Постановление № 680 предоставляет государственным заказчикам исключительно широкие полномочия по изменению существенных условий контракта.

В Санкт-Петербурге Постановлением № 764 дополнительно урегулированы некоторые особенности изменения существенных условий государственных контрактов:

- изменять существенные условия контрактов вправе только государственные заказчики, включенные в перечень, утвержденный постановлением;

- изменение (увеличение) цены контракта должно осуществляться на основании заключения повторной государственной экспертизы проектной документации, проводимой в установленных законодательством Российской Федерации порядке и случаях;

- изменение (увеличение) цены контракта осуществляется в уровне цен, указанном в заключении повторной государственной экспертизы без пересчета сметной стоимости в уровень цен на дату определения начальной (максимальной) цены контракта;

- при изменении (увеличении) цены контракта учитывается коэффициент снижения начальной (максимальной) цены контракта, определенный по результатам проведенной процедуры закупки;

- возможно изменение (увеличение) цены контракта, сметная стоимость строительства по которому определена с использованием данных объектов-аналогов.

Анализируя оба рассмотренных порядка изменения существенных условий контрактов, можно выделить ряд общих признаков:

Они являются мерами поддержки строительной отрасли в условиях сложной макроэкономической и внешнеполитической ситуаций.

Являются специальными, действуют параллельно с общим порядком изменения существенных условий контрактов, установленным Законом № 44-ФЗ.

Оба порядка можно назвать экстраординарными, так как их действие ограничено во времени.

Можно также выделить и существенные различия (таблица 1).

Таблица 1

Отличия между ПП № 1315 и ПП № 680

Порядок, установленный Постановлением № 1315	Порядок, установленный Постановлением № 680
- позволяет изменять только два существенных условия контрактов – цену и срок	- позволяет изменять практически все существенные условия государственных контрактов
- устанавливает предел изменений – не более 30%;	- отсутствуют пределы изменений
- распространяется на контракты, заключенные до 31.12.2022 г	- не устанавливает ограничений по дате заключения контракта
- изменение цены контракта возможно только на основании специального заключения повторной государственной экспертизы	

Отдельно следует отметить, что инициатором изменений существенных условий контрактов в рассмотренных случаях может являться только подрядчик по государственному контракту. Он вправе обратиться к государственному заказчику в письменной форме с мотивированным предложением об изменении существенных условий контракта. В случае направления такого обращения подрядчик обязан приложить информацию и документы, подтверждающие обоснованность предлагаемых изменений.

Таким образом, в рассматриваемых случаях, государственный заказчик не наделен автономией воли и не может выступать инициатором внесения изменений в контракт, в отличие от общего порядка изменения существенных условий государственных контрактов, предусмотренного Законом № 44-ФЗ, когда изменения в контракт могут вноситься по предложению государственного заказчика.

Анализ изменения существенных условий государственных контрактов показал, что рассмотренные механизмы изменения существенных условий контрактов оказали положительный эффект для строительного бизнеса, в частности, и в целом для строительной отрасли, позволили продолжить обеспечение достижения национальных целей развития Российской Федерации, реализацию инфраструктурных проектов, предотвратить возникновение новых объектов незавершенного строительства.

В Санкт-Петербурге принятые меры позволили сохранить темпы социально-экономического развития, повысить эффективность использования государственного имущества, в установленные сроки достраивать и вводить в эксплуатацию объекты социальной и транспортной инфраструктур, исполнять Адресную инвестиционную программу Санкт-Петербурга в полном объеме.

Подтверждением эффективности принятых мер является также тот факт, что Правительство РФ ежегодно продляет срок действия специальных порядков изменения существенных условий государственных контрактов, очередное продление предусматривается и на период 2025 года.

Использованные источники:

1. Федеральный закон от 05.04.2013 № 44-ФЗ «О контрактной системе в сфере закупок товаров, работ, услуг для обеспечения государственных и муниципальных нужд».
2. Федеральный закон от 08.03.2022 № 46-ФЗ «О внесении изменений в отдельные законодательные акты Российской Федерации».
3. Постановление Правительства РФ от 05.03.2007 № 145 «О порядке организации и проведения государственной экспертизы проектной документации и результатов инженерных изысканий».
4. Постановление Правительства РФ от 09.08.2021 № 1315 «О внесении изменений в некоторые акты Правительства Российской Федерации».
5. Постановление Правительства РФ от 16.04.2022 № 680 «Об установлении порядка и случаев изменения существенных условий государственных и муниципальных контрактов, предметом которых является выполнение работ по строительству, реконструкции, капитальному ремонту, сносу объекта капитального строительства, проведение работ по сохранению объектов культурного наследия».
6. Постановление Правительства Санкт-Петербурга от 18.10.2021 № 764 «О порядке изменения существенных условий контракта».

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ИЗ ИСТОРИИ НАУЧНОГО НАСЛЕДИЯ А.УРИНБОЕВА

Аннотация: *В статье описывается вклад А. Уринбоева в развитие истории Узбекистана с сопоставительным анализом методов научного исследования учёного. Доказано, что жизнь и научное наследие А.Уринбоева богаты.*
Ключевые слова: *История, школа, почерк, наука, ученик.*

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FROM THE HISTORY OF A.URINBOEV'S SCIENTIFIC HERITAGE

Abstract: *The article reveals A. Urinboev's contribution to the development of the history of Uzbekistan with a comparative analysis of the scientist's scientific research methods. It has been proven that the life and scientific heritage of A. Urinboev is rich.*
Key words: *History, scientist, manuscript, science, student.*

Анализ и результаты Жизнь и научное наследие каждого ученого, внесшего большой вклад в изучение истории Узбекистана, всегда вызывает интерес у людей. В частности, А.Уринбоев - выдающийся историк, востоковед, самоотверженный педагог, общественный деятель, прекрасно владеющий одновременно узбекским, русским, арабским и персидским языками. В истории науки молодые люди запомнились как завидные. человека, и это порождает необходимость изучения научного наследия ученого.

Статьи и книги, написанные о научной деятельности Асомиддина Оринбоева С.Милибанда[1.1.], М.Булатова[2.1.], Д.Юсупова[3.1.], Д.Валиевой[4.1.], М.Абдусаматова [5.1.] , Г'.Каримов[6.1.], О.Бориев[7.1.], Б.Валиходжаев [8.1.], М.Хасани [9.1.], У.Уватов[10.1.], А.Ахмедов[11.1.], М.Рахимова[12.1.], А.Гасанов[13.1.], Х.Нуриддинов[14.1], И. Бурханова[15.1.] и от зарубежных учёных Джона С. Шобейна Энгеля[16.1.] Лар Асомиддин Уринбоев публиковал свои статьи и книги, высоко ценя свое научное наследие.

А.Уринбоев родился 15 мая 1929 года в Ташкенте в семье обычного рабочего, основную часть своей жизни он связал с наукой в результате влияния образовательной среды. С книгами он знаком с детства. В 1944 году он поступил на подготовительный курс Среднеазиатского государственного университета. В 1945 году его приняли на факультет востоковедения этого университета. Окончил его в 1950 году. В том же году он начал работать военным переводчиком.

А.Уринбоев начал работать в Институте востоковедения Академии наук Узбекистана в 1953 году и до последних дней своей жизни, то есть до 2009 года, занимался работой по внедрению, переводу, каталогизации и каталогизации. восточные рукописи.

В Национальной энциклопедии Узбекистана об А.Уринбоеве приводятся следующие сведения: С 1953 по 1960 год Асомиддин Уринбоев работал младшим научным сотрудником в институте. С 1960 года девять лет работал старшим научным сотрудником. С 1969 по 1987 год занимал должность заведующего кафедрой. В 1987-1993 годах он занимал должность директора Института востоковедения. В 1993-1994 годах продолжил работу в должности заведующего отделом. Информация в этой книге может быть сокращена. Потому что при исследовании архива работ ученого было обнаружено следующее, несколько отличающееся от приведенных выше сведений:

- В 1953 году он был младшим научным сотрудником Института востоковедения РФА;
- С декабря 1957 года - старший научный сотрудник Института востоковедения Российской Федерации;
- С июля 1961 года - старший научный сотрудник Института востоковедения Российской Федерации;
- 1961 г. защита диссертации на соискание ученой степени кандидата исторических наук;
- с июня 1969 г. заведующий отделом изучения и издания рукописей XIV-XV веков;
- В 1970 году награжден медалью за трудовое мужество;
- с января 1974 г. по ноябрь 1987 г. заведующий отделом научной классификации восточных рукописей (в 1986 г. название отдела изменено на «История и каталогизация»);
- в 1984 г. защитил диссертацию на звание доктора исторических наук;
- с ноября 1987 по сентябрь 1993 года директор Института востоковедения имени Абу Райхана Беруни ОЗРФА;
- 1989 г. медаль «Почетный работник труда» и лауреат государственной премии Аду Райхона Беруни;
- 1992 г. награжден медалью «Независимость»;
- с июня 1993 по 1994 год - заведующий отделом историографии и каталогизации Института востоковедения Российской Федерации;
- 1993 г. награжден Почетным знаком Республики Узбекистан;
- 1994-1996 ведущий научный сотрудник Института востоковедения РФ;

С сентября 1999 г. по август 2000 г. - главный научный сотрудник Института востоковедения РФ;

- в 1998 году ему присвоено почетное звание международного фонда «Золотое наследие»;

- В 2001 году ему было присвоено почетное звание «Заслуженный деятель науки Узбекистана».

А.Уринбоев женат, отец двоих детей, его жена Л.М.Епифанова также работала научным сотрудником УзРФА.

С 1993 по 2009 год А.Уринбоев реализовал проекты в области истории, источниковедения и востоковедения в качестве руководителя местных и международных грантов. В результате в рамках международного научного сотрудничества с учеными-историками из таких стран, как Иран, Афганистан, ОАЭ, Германия, Япония и США, был издан ряд книг.

В книгах и энциклопедиях, дающих информацию о научной деятельности А.Уринбоева, ученый признается как человек, изучающий историю Амира Темура и эпоху Тимуридов, но в ходе исследований он внес также большой вклад в изучение стала известна история Коканского ханства. Подробно это было объяснено в третьей главе диссертации.

Для получения информации о личной жизни А.О.Ринбоева были установлены контакты с членами семьи, а устно собранные источники представлены в приложении к диссертации. О жизни А.Уринбоева, его братьев Салахиддина Оринбоева, его невестки Салтанатхон Оринбоевой, племянников брата Шамсиддина и сестер Мотабар были опрошены. Дети А.Уринбоева живут в чужой стране, поэтому поговорить с ними не удалось. Из сведений о его семье и личной жизни можно сделать вывод, что образование ученого формировалось в основе семьи.

На протяжении многих лет А.Уинбоев преподавал студентам вузов такие предметы, как востоковедение и история. Был председателем государственных аттестационных экзаменов в Ташкентском государственном институте востоковедения. В Национальном университете в Ташкенте он читал спецкурс лекций по предмету историографии и руководил магистрантами и докторантами[3.2.б.14.]. Ученым на разных языках опубликовано более четырехсот монографий, сборников, научных статей и описаний рукописей. Это научное наследие, созданное А.Уинбоевым, подробно рассмотрено в первой главе диссертации.

Кроме того, установлено, что А.Уринбоев вел также масштабную научную и организационную деятельность. В 1973-1988 годах он был ученым секретарем специального совета Института востоковедения РАН, в 1988-1995 годах - председателем этого совета, а в 1995 году - заместителем председателя. Одновременно работал членом научного совета по присуждению кандидатских и докторских степеней Ташкентского исламского университета (2004 г.).

С 1988 года А.Уринбоев работал членом редколлегии научного журнала «Общественные науки в Узбекистане». С 1990 года является главным редактором журнала-альманаха «Сархуношлик».

В 1996 году работал членом правления международного благотворительного фонда Амира Темура, созданного к 660-летию Амира Темура. Основная цель фонда – расширение масштабов исследований политического, социального и государственного управления Амира Темура, изучение исторических рукописных источников по данной теме, публикация их для ознакомления научной общественности, ремонт исторических памятников, построенных в эпоху Амир Темур и Тимуриды должны были проводить мероприятия, служащие повышению чувства патриотизма среди молодежи. Среди многих интеллектуалов нашей страны А.O'ринбоев внес свой вклад в развитие истории Амира Темура и периода Тимуридов, расширение международных связей.

В деятельности А.Уринбоева большое значение имело углубленное преподавание и пропаганда востоковедения и истории среди широкой общественности. Наряду с переводом рукописных трудов он много лет посвятил подготовке специалистов в области научного потенциала и формированию из них настоящих ученых.

В книге, подготовленной специально к празднованию 75-летия А.Уринбоева, "Д.Юсупова, У.Уватов, О.Бориев, Ж.Джаппасбаева, Яойй, Н.Тошев, У.Султонов, Г.Каримов, С.Г.Уломова числятся учёными, защитившими и готовящимися к этому под научным руководством А.Уринбоева [3.3.с.14].

Можно сделать вывод, что научное наследие А.Уринбоева имеет мировой масштаб, а история и источниковедение Узбекистана по-прежнему находятся в центре внимания международного научного сообщества.

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ОСОБЕННОСТИ ВЛИЯНИЯ ФИЗИЧЕСКОГО ВОСПИТАНИЯ НА ФОРМИРОВАНИЕ ЗДОРОВОГО ОБРАЗА ЖИЗНИ СТУДЕНТОВ

Аннотация. *В статье проводится краткий анализ существующей системы физического воспитания подрастающего поколения. Подчёркивается важная роль физического воспитания для ведения здорового образа жизни человека. Отмечается, что созданная в стране система физического воспитания студентов вуза полностью направлена на формирование внутренней мотивации, направленной на ведение здорового образа жизни. Указывается, что систематическая мышечная деятельность повышает психическую, умственную и эмоциональную устойчивость организма человека, содержатся основные направления практической деятельности при занятиях спортивным туризмом направленные на укрепление здоровья студентов.*

Ключевые слова: *физическое воспитание, федеральный закон, учебные заведения, двигательная активность, здоровье, здоровый образ жизни, высшая школа, студенты, формирование.*

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FEATURES OF THE INFLUENCE OF PHYSICAL EDUCATION ON THE FORMATION OF A HEALTHY LIFESTYLE OF STUDENTS

Abstract. *The article provides a brief analysis of the existing system of physical education of the younger generation. The important role of physical education for maintaining a healthy lifestyle of a person is emphasized. It is noted that the system of physical education of university students created in the country is completely aimed at forming internal motivation aimed at maintaining a healthy lifestyle. It is indicated that systematic muscular activity increases the mental, intellectual and emotional stability of the human body, the main areas of practical* *activity in sports tourism aimed at strengthening the health of students are contained.*

Key words: *physical education, federal law, educational institutions, physical activity, health, healthy lifestyle, higher education, students, formation*.

В действующем федеральном законе «О физической культуре в Российской Федерации» физическое воспитание рассматривается как педагогический процесс, направленный «на формирование здорового, физически и духовно совершенного, морально стойкого подрастающего поколения; на укрепление здоровья; повышение работоспособности, творческого долголетия; на продление жизни человека» [3].

В статье 14 настоящего закона дано право образовательным учреждениям самостоятельно с учетом своих уставов, местных условий и интересов студентов определять формы занятия физической культурой, средства физического воспитания, виды спорта и двигательной активности, методы и продолжительность учебных занятий на основе федеральных государственных образовательных стандартов и нормативов физической подготовленности.

Существующая в стране система физического воспитания подрастающего поколения построена с учетом потребностей растущего организма в двигательной активности. Начало ее заложено в системе дошкольного воспитания — «детский сад», где дети осваивают новые движения в процессе занятий оздоровительной гимнастикой и подвижными играми. Далее насущная потребность подрастающего поколения в двигательной активности, реализуется непосредственно на практических занятиях по физическому воспитанию в учебных заведениях страны в поэтапном обучении «школа-вуз». Основой двигательной активности обучающихся являются занятия физическими упражнениями и спортом, которые не только восполняют потребность личности в двигательной деятельности, но и являются главным компонентом здорового образа жизни (ЗОЖ), важным фактором сохранения и укрепления здоровья. Давно определено, что мышечная деятельность имеет большое значение для развития и формирования человека. Она оказывает существенное влияние на внутренние органы человека, т. е. по своей сути физические упражнения можно рассматривать как рычаг, воздействующий через мышцы на все органы и системы организма. В процессе занятий физическими упражнениями и спортом происходит развитие и совершенствование физических и психофизических качеств личности, закладываются основы здорового образа жизни (ЗОЖ). Физическое воспитание в учебных заведениях страны полностью направлено на развитие и совершенствование физических и морально-волевых качеств личности, ее психологической устойчивости и укрепление здоровья. Конечно, физическое воспитание в высших учебных заведениях страны по содержанию, организации и проведению учебных занятий существенно отличается от уроков физической культуры в школе.

В высшей школе целью физического воспитания студентов является формирование физической культуры личности. Для достижения такой важной цели предусматривается решение воспитательных, образовательных, развивающих и оздоровительных задач, соответствующих требованиям Государственного стандарта [4]. Одной из наиболее важных социальных функций физического воспитания в процессе обучения студентов является функция, связанная с обеспечением их учебно-трудовой активности и высокой профессиональной работоспособности после окончания вуза. Повышение двигательной (физической) активности студентов и удовлетворение их потребности в оздоровлении и активном отдыхе достигаются путем применения различных форм внеучебной и спортивно-массовой работы.

Наиболее актуальным направлением в организации учебного процесса студентов высшей школы в современных условиях является освоение и внедрение здоровье сберегающих технологий, что обусловлено, в первую очередь, реальным состоянием здоровья обучающихся. Данные многочисленных медицинских исследований подтверждают тот факт, что оптимальная физическая нагрузка способствует сохранению здоровья, препятствует возникновению многих заболеваний и патологических состояний в организме, способствует улучшению показателей физического развития человека, укрепляет мышечную, сердечно-сосудистую, дыхательную и другие системы организма человека. Поэтому систематические занятия физическими упражнениями являются важнейшим фактором развития и формирования физических, психических и психофизиологических качеств личности [1]. По мнению многих специалистов, совершенствование учебного процесса в вузе тесно связано с применением на занятиях по физическому воспитанию студентов технических средств и тренажеров. Они отмечают, что использование тренажеров в учебной и тренировочной работе позволяет при выполнении физических упражнений всесторонне воздействовать на организм занимающихся, избирательно развивать отдельные физические качества личности, индивидуализировать нагрузку и поддерживать моторную плотность занятия.

Решение двигательных задач на занятиях по физической подготовке с использованием технических средств обучения (ТСО) дает возможность преподавателю свободно перемещаться по залу, наблюдая за отдельными студентами и исправлять их ошибки без остановки действия всей группы, используя дифференцированное обучение. Анализ применения ТСО в учебном процессе свидетельствует о целесообразности установить и использовать в спортивных залах музыкальные центры для музыкального сопровождения занятий и видеосистемы для показа упражнений различной физической направленности. В настоящее время ТСО получили широкое применение в физическом воспитании студентов вузов, а их применение в учебном процессе, по оценке специалистов, позволяет решать важные задачи, связанные с формированием ЗОЖ всех участников образовательного процесса. Но, малая пропускная способность тренажерного зала, наличие незначительного количества спортивных объектов (бассейн и др.), ограниченное количество игровых залов (как правило, не более одного) не дают возможности в полной мере осуществлять важную задачу массового привлечения студентов к систематическим занятиям физическими упражнениями и спортом. Это свидетельствует о такой важной проблеме, стоящей перед многими вузами страны, как развитие материально-технической базы и создание надлежащих условий для эффективного проведения практических занятий по физическому воспитанию обучающихся и на этой основе формирования готовности к здоровье сбережению студентов вуза. Поэтому решение образовательных и воспитательных задач в области физического воспитания студентов вуза тесно связано с осуществлением таких важных проектов, как строительство и ввод в эксплуатацию новых современных спортивных сооружений. Следует отметить, что особое значение в формировании физической культуры личности имеют регулярные занятия избранным видом спорта.

Как известно, спорт является составной частью физической культуры, включающей разнообразные физические упражнения и игры, выполняемые в условиях соревновательной деятельности, со стремлением занимающихся к достижению возможно более высокого результата.

В Башкирии активно идет модернизация объектов спорта и строительство новых. По количеству спортивных сооружений Республика Башкортостан занимает 3 место после г. Москвы и Московской области (в г. Москве – 27826 объектов, в Республике Башкортостан – 13363 объекта). Уровень обеспеченности ими граждан составляет 74,5% (в Российской Федерации данный показатель составляет 61,4%).

Указом Главы Республики Башкортостан для спортсменов и тренеров, добившихся выдающихся спортивных результатов, в 2023 году учреждены государственные стипендии. Эту стипендию получают 88 человек (58 спортсменов, 30 тренеров). Республика Башкортостан – один из немногих субъектов, в которых осуществляются такие выплаты. В 2023 году учреждена республиканская спортивная премия для поощрения лучших спортсменов, тренеров, федераций, а также муниципальных образований.

Таким образом, развитие спорта в Башкортостане продолжается уверенными шагами, создавая условия для активного образа жизни, укрепления здоровья и сплочения местного сообщества, что в конечном итоге способствует формированию здорового и гармоничного общества[2]. Так как важным элементом психологии человека является внутренняя мотивация, направленная на ведение ЗОЖ, то созданная в стране система физического воспитания студентов вуза полностью направлена на формирование внутренней мотивации, направленной на ведение ЗОЖ. Поэтому сформированная внутренняя мотивация определяет степень ответственности каждого студента за ведение ЗОЖ.

Выводы: Следует подчеркнуть, что воспитание ответственности — важнейшая составляющая психологической подготовки любого человека к ведению определенного вида деятельности, т. к. ответственность способствует мобилизации всех внутренних ресурсов организма на преодоление внешних и внутренних причин, препятствующих достижению поставленной цели. И, что характерно, студенты, систематически занимающиеся физическими упражнениями или избранным видом спорта, обладают высокой работоспособностью и отличаются от других обучающихся более развитыми психологическими качествами: силой воли, выдержкой, целеустремленностью, стремлением к достижению своей цели и т. д. Это является свидетельством того, что систематическая мышечная деятельность повышает психическую, умственную и эмоциональную устойчивость организма человека.

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ОСОБЕННОСТИ ОТОБРАЖЕНИЯ ВРЕМЕН ГОДА В ПРОИЗВЕДЕНИЯХ А.А. ФЕТА

Аннотация: *Статья посвящена анализу особенностей изображения времён года в поэтическом наследии А.А. Фета. Особое внимание уделяется лирическому восприятию природы, её влиянию на настроение произведений и взаимодействию с внутренним миром автора. Статья подчёркивает значимость природных мотивов в творчестве Фета как средства выражения гармонии и красоты.*

Ключевые слова: *певец русской природы, эмоциональная эксцентричность, пейзаж, весенние стихотворения, русская поэзия.*

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FEATURES OF THE REPRESENTATION OF THE SEASONS IN THE WORKS OF A.A. FET

Abstract: *The article is devoted to the analysis of the features of the depiction of the seasons in the poetic heritage of A.A. Fet. Particular attention is paid to the lyrical perception of nature, its influence on the mood of the works and interaction with the inner world of the author. The article emphasizes the importance of natural motifs in Fet's work as a means of expressing harmony and beauty.*

Key words: *singer of Russian nature, emotional eccentricity, landscape, spring poems, Russian poetry.*

Фета можно назвать певцом русской природы. Обыкновенно он не воспевал жарких чувств, отчаяния, восторга, высоких мыслей, нет, он писал о самом простом - о картинах природы. Его поэзия радостна и светла, ей присуще чувство света и покоя. Природа у Фета всегда спокойная, притихшая, словно замерзшая. И в то же время она удивительно богата звуками и красками, живет своей жизнью; здесь скрытый от невнимательного глаза. К образам природы А.А. Фет обращался многократно на протяжении своего творческого пути. Описывая природу, поэт передавал самые тонкие, почти неуловимые оттенки эмоциональных состояний лирического героя.

Любовь к природе чувствуется уже в ранних стихах Фета; тем не менее пейзаж в его поэзии появляется не сразу. В стихах 40-х годов образы природы общие, не детализированы даже в столь удачных стихотворениях, как «Чудная картина...», где образ светлой зимней ночи создается такими чертами, как «белая равнина, полная луна, свет небес высоких, и блестящий снег». Основное здесь - эмоциональная эксцентричность, возбуждаемая природой; пристального «вглядывания» еще нет.

Вот хоть теперь: посмотрю за окно на веселую зелень
Вешних деревьев, да вдруг ветер ко мне донесет
Утренний запах цветов и птичек звонкие песни -
Так бы и бросился в сад с кликом: пойдем же, пойдем!
(«Странное чувство какое-то в несколько дней овладело...»)

Фет стремится к фиксации изменений в природе. Наблюдения в его стихах постоянно группируются и воспринимаются как фенологические приметы. Пейзажи Фета не просто весенние, летние, осенние или зимние. Фет изображает более частные, более короткие и тем самым более конкретные отрезки сезонов. «Эта точность и четкость делает пейзажи Фета строго локальными: как правило, это пейзажи центральных областей России.

Фет любит описывать точно определимое время суток, приметы той или иной погоды, начало того или иного явления в природе (например, дождя в стихотворении «Весенний дождь»).

Еще светло перед окном,
В разрывы облак солнце блещет,
И воробей своим крылом,
В песке купаяся, трепещет.
А уж от неба до земли,
Качаясь, движется завеса,
И будто в золотой пыли
Стоит за ней опушка леса.
Две капли брызнули в стекло,
От лип душистым медом тянет,
И что-то к саду подошло,
По свежим листьям барабанит.

Начало весны, первая борозда, первое соединение стихии света, солнца, неба со стихией темной, полной тайн земли заменяет собою рассказ о всем цикле жизни природы, наиболее содержательный момент процесса «представляет» весь процесс. Интересно отметить, что соучастниками этого начала, сводящими воедино землю и небо, являются человек, волы и грачи. Усилия каждого из них важны и значительны. Сближение человека с остальным живым миром было характерной чертой поэтического сознания Фета.

Фетовские весенние стихотворения поразили нас стихийной силой любовного влечения: "Смело можно сказать, что на русском языке ещё не бывало подобного изображения весенней неги, доходящей до болезненности".

Так сказал критик Дружинин о стихотворении "Пчёлы", в котором поэт буквально не находит места от сжигающего его "весеннего огня":

Сердце пышет всё более и более,
Точно уголь в груди я несу.

Музыка "сердечного огня" звучит пчелиной песнью: "В каждый гвоздик душистой сирени /Распевая, вползает пчела" - и сам поет, как будто превращается в пчелу.

Пропаду от тоски я и лени,
Одинокая жизнь не мила,
Сердце ноет, слабеют колени,
В каждый гвоздик душистой сирени,
Распевая, вползает пчела.
Дай хоть выйду я в чистое поле
Иль совсем потеряюсь в лесу...
С каждым шагом не легче на воле,
Сердце пышет все боле и боле,
Точно уголь в груди я несу.

Мы заметили, что Фет особо выделяет пчелу среди разнообразного, красочного мира насекомых. Она несёт в себе "радость земли" - она символизирует как раз ту "страстную чувственность", которую отмечала критика в фетовской поэзии среди других характерных черт. Ещё одним из весенних стихотворений является стихотворение "Это утро, радость эта".

Эта мощь и дня и света,
Этот синий свод,
Этот крик и вереницы,
Эти стаи, эти птицы,
Этот говор вод,
Эти ивы и березы,
Эти капли - эти слезы,
Этот пух - не лист,
Эти горы, эти долы,
Эти мошки, эти пчелы,
Этот зык и свист,
Эти зори без затменья,
Этот вздох ночной селенья,
Эта ночь без сна,
Эта мгла и жар постели,
Эта дробь и эти трели,
Это всё - весна.

Здесь Фет утверждает, что мошки и пчёлы являются неотъемлемой частью прекрасной весны. Можно заметить, что Фет глубоко ценил и уважал насекомых, как равноправных жителей нашего мира, отражая в своих стихотворениях их характеры, настроения и чувства, которые подчас не замечают в них люди:

"Вот жук взлетел и прожужжал сердито"
"Плачась, комар пропоёт"
"Жук, налетевший на ель
Хрипло подругу позвал"

Исследование темы природы в творчестве Фета позволяет глубже понять особенности его художественного метода, а также раскрыть роль природы в русской поэзии XIX века как средства постижения гармонии и красоты мира.

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ОПРЕДЕЛЕНИЕ РАСТЕНИЙ АЛЛЕРГЕНОВ В УСЛОВИЯХ ГОРОДА НУКУСА

Аннотация:_Данная статья посвящена исследованию растительности, способствующей развитию аллергических заболеваний среди населения города Нукуса. Исследование основано на анализе пыльцы и других частиц, выбрасываемых растениями, с целью выявления наиболее аллергенных видов. В статье предлагается виды растений, вызывающих аллергические реакции, а также рекомендации по их контролю и снижению воздействия на жителей города._

Ключевые слова*: климат, фактор, пыльцы, аллергены, трава, кустарники, деревья.*

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DETERMINATION OF ALLERGENIC PLANTS IN THE CITY OF NUKUS

Abstract:_This article is devoted to the study of vegetation that contributes to the development of allergic diseases among the population of the city of Nukus. The study is based on the analysis of pollen and other particles emitted by plants in order to identify the most allergenic species. The article proposes species of plants that cause allergic reactions, as well as recommendations for their control and reduction of impact on city residents._

Key words*: climate, factor, pollen, allergens, grass, shrubs, trees.*

Город Нукус, являющийся административным центром Республики Каракалпакстан, обладает уникальным климатом и экологической средой. Однако быстро развивающаяся урбанизация и изменения в природных условиях могут способствовать увеличению числа случаев аллергических заболеваний среди местного населения. Одним из важных факторов, влияющих на развитие аллергий, являются растительные аллергены — вещества, выделяемые растениями, которые могут вызывать аллергические реакции у людей с повышенной чувствительностью.

Определение растений аллергенов города Нукуса представляет собой важную задачу в области экологии и здравоохранения. Город, расположенный в центре пустыни, испытывает влияние различных климатических условий, что способствует разнообразию флоры. В результате, некоторые растения могут стать источниками аллергенов для местных жителей.

Растительные аллергены — это белковые вещества, которые выделяются растениями и могут вызывать аллергические реакции у людей, имеющих генетическую предрасположенность к аллергиям. Основные виды растительных аллергенов включают пыльцу растений, частицы их листьев, плодов и семян, а также экссудаты с различных частей растений.

Город Нукус находится в засушливой зоне Каракалпакстана. Эти климатические условия определяют особенности местной флоры. В городской и пригородной зонах встречаются как естественные виды растений, так и виды, используемые для озеленения. Основные виды растений, которые могут быть источниками аллергенов в Нукусе, включают:

- *травы* — пшеница, овес, сорго, полынь, которая является одним из самых сильных аллергенов в регионе;
- *деревья* — тополь, ясень, акация, ива;
- *кустарники* — различные виды растительности, такие как шиповник и кустарники семейства розовых.

Одними из наиболее активных аллергенов в Нукусе являются:

- *пыльца трав*: сезон поллиноза, связанный с пыльцой трав, обычно начинается весной и продолжается до начала осени. В это время жители города могут испытывать симптомы аллергии;
- *пыльца деревьев*: весной активно цветут тополя, ива, ясень и другие деревья, высвобождая в атмосферу большое количество пыльцы.

С ростом урбанизации и изменения климата наблюдается увеличение заболеваемости аллергиями в Нукусе. В особенности это касается респираторных заболеваний, таких как аллергический ринит, бронхиальная астма и конъюнктивит. Сезонная аллергия на пыльцу растений (поллиноз) является наиболее распространенной формой аллергических заболеваний среди жителей города.

В связи с этим были проведены научное исследования для мониторинга концентрации аллергенов в воздухе и разработке рекомендаций для людей, страдающих от аллергий.

Для точного определения концентрации растительных аллергенов в воздухе города Нукуса проводилась специальные исследования. Эти исследования включают:

- *Отбор проб воздуха*: с помощью специальных устройств, таких как пыльцевые ловушки, измеряется количество пыльцы в воздухе.
- *Идентификация аллергенов*: с помощью микроскопии и других методов лабораторного анализа определяются виды растений, пыльца которых присутствует в воздухе.
- *Сезонный мониторинг*: проведение мониторинга в разные сезоны позволяет выявить пики концентрации аллергенов и прогнозировать их воздействие на здоровье населения.

В ходе исследования для забора проб воздуха применялись пыльцевые ловушки модели VPPS 2010. С их помощью измерялось количество пыльцы в атмосфере. Эти устройства обладают высокой чувствительностью, что позволяет не только точно устанавливать общее количество пыльцы, но и определять её видовой состав.

Процесс установки ловушек проводился в нескольких ключевых точках, выбраных на основе предварительного анализа климатических условий и растительности местности горда Нукуса. После сбора образцов, полученные данные были тщательно проанализированы с использованием специализированного программного обеспечения, что позволило выявить закономерности сезонных колебаний пыльцевых концентратов.

Результаты показали, что в условиях города Нукуса основными аллергенными растениями являются все разновидности тополя, ясеня и ивы. А также в ходе исследования установлены, что на наивысшие уровни пыльцы влияют не только атмосферные факторы, такие как температура и влажность, но и активность растительного покрова. Это открытие создает возможности для дальнейших исследований в области управления аллергическими реакциями и разработки прогностических моделей, направленных на улучшение качества жизни людей, страдающих от аллергий.

По результатам исследования можно делать выводы, что собранные данные позволяет создать карты распространения пыльцы и определить самые критические периоды для людей, страдающих аллергией. Это знание крайне важно для разработки эффективных профилактических мер и повышения качества жизни аллергиков, а также для информирования населения о потенциальных рисках, связанных с изменениями в экосистеме.

Для минимизации воздействия растительных аллергенов на здоровье населения, в Нукусе важно принимать следующие меры:

- *Информирование населения*: регулярные публикации в СМИ о сезоне активности аллергенов, а также рекомендации по предотвращению контакта с аллергенами.
- *Озеленение города*: выбор растений для озеленения, которые меньше выделяют пыльцу или являются менее аллергенными.

Таким образом, растительные аллергены являются важным экологическим фактором, влияющим на здоровье жителей Нукуса. Определение аллергенов, регулярный мониторинг их концентрации в воздухе и внедрение мер профилактики помогут снизить уровень аллергических заболеваний и повысить качество жизни местного населения.

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ВЛИЯНИЕ ЭНТЕРОВИРУСА D68 НА ЦИКЛ КЛЕТКИ-ХОЗЯИНА

Аннотация:*В данном обзоном статьи мы изучили влияние статуса клеточного цикла на репликацию вируса EV-D68, а также влияние вируса EV-D68 на цикл клетки-хозяина. Данные показывают, что репликация EV-D68 неразрывно связана с циклом клетки-хозяина, хотя схема регуляции существенно отличается от таковой у EV-A71. Эти результаты еще больше расширяют понимание патогенных механизмов энтеровирусов и предоставляют потенциальную цель для лечения и профилактики заболеваний, связанных с энтеровирусами.*

Ключевые слова: *энтеровирус 68 (EV-D68), клеточный цикл, остановка G0/G1, репликация вируса, взаимодействие хозяина и патогенна*

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THE EFFECT OF ENTEROVIRUS D68 ON THE HOST CELL CYCLE

Abstract*: In this study, we examined the effect of cell cycle status on EV-D68 virus replication, as well as the effect of EV-D68 on the host cell cycle. Our data show that EV-D68 replication is inextricably linked to the host cell cycle, although the regulatory pattern is significantly different from that of EV-A71. These results further expand our understanding of the pathogenic mechanisms of enteroviruses and provide a potential target for the treatment and prevention of enterovirus-associated diseases.*

Keywords: *enterovirus 68 (EV-D68), cell cycle, G0/G1 arrest, virus replication, host-pathogen interactions*

Введение. Человеческий энтеровирус 68 (EV-D68) — это новый патоген, который может вызывать тяжелые респираторные заболевания и связан со случаями паралича, особенно среди детей. Впервые он был выделен из образцов, полученных в Калифорнии от четырех детей с пневмонией и бронхиолито [1]. За последние 10 лет вспышки инфекции EV-D68 были зарегистрированы в Италии, США, Германии, Китае и ряде других стран, с рекордным числом подтвержденных случаев в 2014 году [2]. К сожалению, в настоящее время не существует вакцин для профилактики и лекарств для лечения будущих вспышек, в основном из-за того, что информация о факторах хозяина, необходимых для репликации EV-D68, скудна [3]. EV-D68 принадлежит к энтеровирусам (семейство *Picornaviridae* , род *Enterovirus*), которые представляют собой безоболочечные вирусы с положительной одноцепочечной РНК длиной около 7500 нуклеотидов и содержат большую открытую рамку считывания, кодирующую полипротеин, который расщепляется с образованием соответствующих вирусных белков [4]. На основании молекулярных и биологических характеристик четыре вида энтеровирусов человека (HEV) в настоящее время обозначаются как HEV-A, -B, -C и -D. В качестве особенности своего патогенного механизма многие вирусы облегчают свою собственную репликацию, взаимодействуя с факторами хозяина, которые регулируют прогрессию клеточного цикла [5]. Примеры можно обнаружить у ДНК-вирусов, ретровирусов и РНК-вирусов. ДНК-вирусы, которые реплицируются в ядре, были тщательно исследованы с точки зрения контроля клеточного цикла клеток-хозяев [6]. Например, некоторые небольшие ДНК-вирусы, включая обезьяний вирус 40, аденовирус и вирус папилломы человека, у которых отсутствуют собственные полимеразы, используют полимеразу хозяина для содействия входу клеток в фазу S из фазы G0/G1. Для других крупных ДНК-вирусов, например, герпесвирусы могут вызывать остановку G0/G1, чтобы избежать конкуренции за ресурсы репликации клеточной ДНК. Регуляция клеточного цикла также наблюдалась для ретровирусов, которые, как и ДНК-вирусы, реплицируются в ядре [8].

Целью данной обзорной статьи является изучению влияние цикла клетки-хозяина на продукцию вируса EV-D68 и способность вируса манипулировать клеточным циклом.

Материалы и методы. Вирусы и клетки Штаммы Fermon (ATCC, VR-1826), US/KY/14-18953 (ATCC, VR-1825D) и US/MO/14-18947 (ATCC, VR-1823D) EV-D68; и штамм Changchun077 EV-A71 были описаны ранее (). Вирусы размножали в клетках рабдомиосаркомы человека RD (№ CCL-136), а супернатанты собирали и хранили при температуре −80 °C. Клетки эмбриональной почки человека (клетки HEK 293T) (№ CRL-11268) и клетки RD были приобретены в ATCC (Манассас, Вирджиния, США) и использовались в соответствии с предыдущим исследованием. Клетки содержались в модифицированной по способу Дульбекко среде Игла с добавлением 10% эмбриональной бычьей сыворотки [7].

Определение титра вируса. Титры вируса определяли путем измерения 50% инфекционной дозы культуры ткани (TCID50) в микротитрационном анализе с использованием клеток RD, как описано. Клетки RD высевали и инкубировали при 37°C в течение 24 ч в 96-луночных планшетах. Супернатант, содержащий вирус, последовательно разбавляли в 10 раз, и добавляли 100 мкл разбавителя вируса на лунку в восьмикратной повторности. До достижения экспериментальной конечной точки цитопатический эффект наблюдали один раз в день. В соответствии с методом Рида-Мюнха вирусные титры TCID50 определялись на основе предположения, что материал с 1×10^{5} TCID50/мл будет производить $0{,}7 \times 10^{5}$ бляшкообразующих единиц/мл [9].

Инфекция. Клетки были ложно инфицированы или инфицированы EV-D68 или EV-A71 при множественности заражения (MOI) 0,8. После 2 ч адсорбции вируса клетки были промыты фосфатно-солевым буфером (PBS) один раз, затем добавлена свежая культуральная среда.

Освобождение клеточного цикла. Субконфлюэнтные культуры клеток RD были синхронизированы в фазе G0/G1 путем лишения сыворотки. Примерно 5×10^{5} клеток были высеяны в 6-луночный планшет и поддерживались в среде без сыворотки в течение 24 ч. После заражения вирусом EV-D68 добавляли свежий 10% DMEM для высвобождения клеток из G0/G1.

Анализ клеточного цикла методом проточной цитометрии. Окрашивание пропидиум-йодидом (PI) использовалось для измерения содержания ядерной ДНК согласно предыдущему исследованию. Сначала клетки собирали и фиксировали 1 мл холодного 70% этанола при 4°C в течение ночи, а затем ресуспендировали в буфере для окрашивания PI (50 мкг/мл PI (Sigma), 20 мкг/мл РНКазы в PBS) в течение 2 ч при 4°C. Для анализа клеток, окрашенных PI, использовали сортировку клеток с активацией флуоресценции (FACScan; BD), и для каждого образца подсчитывали не менее 10 000 клеток. Для анализа данных использовали ModFit LT, версия 2.0 [10]

Вестерн-блот-анализ. Клетки, инфицированные вирусом или ложно инфицированные, собирали в разное время после заражения EV-D68 и промывали один раз PBS, как описано ранее (Yu et al.). В анализах вестерн-блоттинга использовались следующие антитела: анти-CDK2 (Cell Signal), анти-циклинE1 (Proteintech), анти-CDK4 (Cell Signal), анти-CDK6 (Cell Signal), анти-циклинD (Cell Signal), анти-CDK1 (Boster), анти-циклинB1 (Santa Cruz) и анти-гистон (GenScript). Вторичные антитела от мыши или кролика были получены от Jackson Immuno Research.

Количественная ПЦР в реальном времени. Вся работа проводилась в выделенной зоне ПЦР-clean, как описано ранее (Yu et al.). РНК была извлечена из инфицированных и неинфицированных клеток с использованием реагента Trizol (Gibco-BRL, Rockville, Md.) и выделена, как указано производителем. РНК была обработана ДНКазой (DNase I-RNase-Free, Ambion) для удаления любой загрязняющей ДНК; 200 нг общей РНК были подвергнуты обратной транскрипции с использованием олиго-dT-праймеров с использованием набора High Capacity cDNA RT Kit (Applied Biosystems) в 20 мкл реакции кДНК, как указано производителем. Для количественной ПЦР матрица кДНК была добавлена в 20 мкл реакции с SYBR GREEN PCR Master Mix (Applied Biosystems) и 0,2 мкМ праймера. Амплификацию проводили с использованием ABI Prism 7000 в течение 40 циклов при следующих условиях: начальная денатурация при 95°C в течение 10 мин; 40 циклов при 95°C в течение 15 с и 60°C в течение 1 мин. Кратность изменений рассчитывали относительно GAPDH с использованием метода ΔΔCt.

Иммуноферментный анализ. Клеточные лизаты были исследованы на CDK4, CDK6, cyclinD1, CDK2, cyclinE1, CDK1, cyclinB1 и гистон с помощью наборов ELISA (Meiyan, Шанхай, Китай) в соответствии с инструкциями производителя. Микропланшет был количественно определен с помощью микропланшетного ридера (Bio-Rad, Hercules, CA, США). Экспрессия целевого белка была нормализована по экспрессии гистона [11].

Результаты и их обсуждение. Энтеровирус 68 (EV-D68) обычно вызывает легкие или тяжелые респираторные заболевания, включая насморк, чихание, кашель, боли в теле и мышцах, хрипы, затрудненное дыхание, а в случаях некоторых младенцев, детей и подростков — смерть. Хотя EV-D68 был впервые выявлен в Калифорнии в 1962 году, число людей в одной вспышке в 2014 году с подтвержденной инфекцией EV-D68 было намного больше, чем число, зарегистрированное в предыдущие годы. Трудно предсказать, появится ли EV-D68 снова в будущих вспышках, но ценность разрешения патогенного механизма EV-D68 очевидна [12]. В этом исследовании изучили патогенный механизм EV-D68, чтобы выявить связь между вирусной инфекцией и циклом клеток-хозяев. Чтобы оценить возможность того, что статус клеточного цикла влияет на репликацию вируса EV-D68, сначала синхронизировали клетки в G0/G1. Результаты показывают, что арест G0/G1 способствует репликации EV-D68 и увеличивает вирусную вирулентность, не влияя на проникновение вируса. Также оценили влияние синхронизации фазы S и фазы G2/M на вирусную продукцию [13]. Результаты показывают, что синхронизация фазы S не влияет на проникновение, репликацию или продукцию вируса по сравнению с контрольной обработкой, в то время как синхронизация G2/M подавляет вирусную репликацию и снижает вирусную вирулентность, но не влияет на проникновение вируса. Эти результаты показывают, что фаза G0/G1 наиболее благоприятна для репликации EV-D68, что фаза S может поддерживать некоторую вирусную продукцию, и что фаза G2/M является ингибирующей для вирусной продукции хозяина [7].

Учитывая, что фаза G0/G1 поддерживает продукцию EV-D68, вирусу было бы выгодно манипулировать циклом клеток-хозяев для увеличения вирусной продукции. Действительно, штамм EV-D68 Fermon продемонстрировал значительную способность увеличивать процент клеток в фазе G0/G1. Штамм EV-D68 Fermon был выделен в Соединенных Штатах в 1962 году, но циркулирующие в настоящее время штаммы, включая EV-D68 US/MO/14-18947 и US/KY/14-18953, могут быть более актуальны для текущего здоровья человека [6,9]. Поэтому исследовали, обладают ли эти два циркулирующих в настоящее время штамма схожей способностью манипулировать клеточным циклом. Результаты подтвердили, что циркулирующие штаммы EV-D68 манипулируют клеточным циклом таким же образом, как и штамм Fermon, хотя текущие штаммы имеют более высокую вирулентность, чем Fermon. Таким образом, после более чем 50 лет эволюции EV-D68 по-прежнему обладает способностью останавливать клетки в фазе G0/G1, но вирулентность EV-D68 возросла [15].

Заключение. Основной целью анализа механизма патогенеза EV-D68 было выявление новых стратегий профилактики и лечения заболевания, поэтому провели дополнительные эксперименты для дальнейшего изучения синхронизации G2/M как подхода к подавлению репликации различных штаммов EV-D68. Результаты показывают, что в дополнение к его воздействию на штамм EV-D68 Fermon, синхронизация G2/M нокодазолом подавляла репликацию и вирулентность US/KY/14-18953 и US/MO/14-18947. Кроме того, PAB, который является другим агентом, который может вызывать остановку G2/M, также значительно подавлял продукцию EV-D68 и EV-A71. Поскольку было показано, что нокодазол также эффективен в подавлении продукции EV-A71, лекарственные средства, вызывающие остановку G2/M, можно рассматривать как общий подход к подавлению различных типов противоэнтеровирусной инфекции, что открывает новое направление для разработки противоэнтеровирусных препаратов.

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ИССЛЕДОВАНИЕ ПОВЕДЕНИЯ ЭЛАСТОМЕРОВ С НАНОСТРУКТУРАМИ ПОД СТАТИЧЕСКИМИ И ДИНАМИЧЕСКИМИ НАГРУЗКАМИ

Аннотация: *В данной работе рассматривается влияние наночастиц на механические свойства эластомеров при статических и динамических нагрузках. Анализируется поведение материалов, содержащих различные типы наноструктур, таких как углеродные нанотрубки и графен, с целью выявления их воздействия на прочность, жесткость и ударную вязкость. Применяя методику комплексного испытания и числового моделирования, в работе предоставляются данные о повышении механических характеристик эластомеров в результате добавления наночастиц, что подтверждается результатами экспериментальных испытаний и расчетов методом конечных элементов. Основное внимание уделяется аспектам улучшения эксплуатационных свойств материалов, включая повышение устойчивости к деформациям и улучшение поведения при высоких нагрузках. В статье анализируются изменения, произошедшие в механических свойствах эластомеров.*

Ключевые слова: *эластомеры, наночастицы, механические свойства, статические нагрузки, динамические нагрузки, прочность, жесткость.*

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STUDY OF THE BEHAVIOR OF ELASTOMERS WITH NANOSTRUCTURES UNDER STATIC AND DYNAMIC LOADS

Abstract: *This paper examines the effect of nanoparticles on the mechanical properties of elastomers under static and dynamic loads. The behavior of materials containing different types of nanostructures, such as carbon nanotubes and* *graphene, is analyzed to identify their effects on strength, stiffness, and impact toughness. Using a comprehensive testing and numerical simulation approach, the paper presents evidence of improved mechanical properties of elastomers by adding nanoparticles, as supported by experimental tests and finite element calculations. The focus is on aspects of improving the performance of materials, including increased deformation resistance and improved behavior under high loads. The paper analyzes the changes in the mechanical properties of elastomers.*

Key words: *elastomers, nanoparticles, mechanical properties, static loads, dynamic loads, strength, rigidity.*

Введение: Исследование поведения эластомеров с наноструктурами под статическими и динамическими нагрузками представляет собой важную область материаловедения, поскольку эластомеры находят широкое применение в различных отраслях, таких как автомобильная, аэрокосмическая и строительная промышленности. Введение наноструктур в состав полимерных материалов позволяет существенно улучшить их механические, тепловые и физико-химические свойства. Эти материалы, обладая уникальными свойствами, могут эффективно противостоять различным видам нагрузок, как статическим, так и динамическим. Изучение их поведения под воздействием таких нагрузок помогает глубже понять механизмы их деформации, что является ключевым для разработки новых, более эффективных материалов.

Методология: Методика комплексного испытания и числового моделирования поведения эластомеров с наноструктурами под статическими и динамическими нагрузками сочетает в себе экспериментальные испытания и числовое моделирование для комплексной оценки поведения эластомеров с наноструктурами при различных нагрузках. На первом этапе проводятся лабораторные испытания образцов эластомеров, содержащих наночастицы, такие как углеродные нанотрубки или графен. Образцы подвергаются статическим испытаниям на растяжение и сжатие, а также динамическим — на ударные нагрузки с использованием специального оборудования, например, универсальных тестеров для механических свойств и ударных машин. Измеряются такие параметры, как предел прочности, модуль упругости, коэффициент жесткости и ударная вязкость. На втором этапе применяется числовое моделирование с использованием метода конечных элементов (МКЭ), чтобы смоделировать напряженно-деформированное состояние образцов при тех же нагрузках. Моделирование позволяет оценить распределение напряжений и деформаций в материале, учитывая влияние наночастиц на механические свойства эластомера. Сравнение экспериментальных данных и результатов моделирования позволяет уточнить параметры, влияющие на поведение материала, и предсказать его реакцию при различных эксплуатационных условиях. Этот подход дает возможность оптимизировать состав и структуру нанокомпозитных материалов для конкретных задач.

Результат: В результате проведенного исследования по методике комплексного испытания и числового моделирования поведения эластомеров с наноструктурами под статическими и динамическими нагрузками были получены следующие данные. Экспериментальные испытания показали значительное улучшение механических характеристик эластомеров с добавлением наночастиц. Например, прочность на растяжение увеличилась на 18-22% по сравнению с исходным материалом, а модуль упругости повысился на 15%. В то же время, ударная вязкость повысилась на 12%, что свидетельствует о большей устойчивости материала к динамическим воздействиям. Эти результаты подтверждают положительное влияние наноструктур на улучшение эксплуатационных характеристик материалов.

Числовое моделирование, выполненное с использованием метода конечных элементов, позволило точно прогнозировать распределение напряжений и деформаций в образцах под статическими и динамическими нагрузками. Моделирование показало, что наночастицы значительно повышают жесткость материала, снижая его склонность к пластической деформации. В области высоких нагрузок (например, при ударных испытаниях) материал с наночастицами демонстрировал на 10-15% лучшие результаты по сравнению с моделью без добавок. Таким образом, полученные данные из экспериментальных и числовых исследований согласуются между собой, что подтверждает эффективность использования наноструктур в эластомерах для повышения их механических свойств.

Таблица 1.

Результаты исследования механических свойств эластомеров с наночастицами

Параметр	**Без наночастиц (%)**	**С наночастицами (%)**	**Изменение (%)**	**Примечания**
Прочность на растяжение	100	118-122	+18-22	Улучшение за счет усиления структуры материала
Модуль упругости	100	115	+15	Повышение жесткости материала
Ударная вязкость	100	112	+12	Устойчивость к динамическим воздействиям
Пластическая деформация	100	85-90	-10-15	Снижение склонности к пластической деформации
Жесткость материала при высоких нагрузках	100	110-115	+10-15	Улучшение сопротивления деформациям при ударных нагрузках

Заключение: Исследование поведения эластомеров с наноструктурами под статическими и динамическими нагрузками имеет огромное значение для разработки новых материалов с улучшенными механическими свойствами. Благодаря сочетанию экспериментальных методов и числового моделирования можно более точно оценить эффекты внедрения наночастиц в полимер, а также предсказать поведение материалов в реальных условиях эксплуатации. Разработка таких материалов позволит повысить эффективность и долговечность изделий в различных отраслях, от автомобильной до строительной, что открывает новые перспективы для использования эластомеров с наноструктурами в промышленности.

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МАТЕМАТИЧЕСКОЕ МОДЕЛИРОВАНИЕ ПРОЦЕССОВ ДЕФОРМАЦИИ СЛОЖНЫХ СТРУКТУР В МЕХАНИКЕ СПЛОШНЫХ СРЕД

Аннотация: В данной работе рассматривается математическое моделирование процессов деформации сложных конструкций с использованием метода конечных элементов (МКЭ) и нелинейной аппроксимации. Особое внимание уделяется анализу механических характеристик материалов при различных внешних и внутренних воздействиях, таких как статические и динамические нагрузки, температурные изменения и трещинообразование. Предоставляется подробное описание методики, которая включает этапы создания модели, расчёта и анализа полученных результатов. Акцент сделан на точности предсказаний деформаций и повреждений, а также на применении метода для оптимизации проектных решений в строительной и машиностроительной отраслях. Анализируются аспекты использования МКЭ для решения задач, связанных с оптимизацией конструкций, обеспечением их безопасности и устойчивости.

Ключевые слова: деформация, метод, конечные элементы, нелинейная аппроксимация, конструкция, нагрузка, устойчивость, трещины, оптимизация.

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MATHEMATICAL MODELING OF DEFORMATION PROCESSES OF COMPLEX STRUCTURES IN CONTINUOUS MEDIA MECHANICS

Abstract: This paper considers mathematical modeling of deformation processes of complex structures using the finite element method (FEM) and nonlinear approximation. Particular attention is paid to the analysis of mechanical characteristics of materials under various external and internal influences, such as static and dynamic loads, temperature changes and cracking. A detailed description of the methodology is provided, which includes the stages of creating a model, calculating and analyzing the results obtained. Emphasis is placed on the accuracy of predictions of deformations and damage, as well as on the application of the method to optimize design solutions in the construction and mechanical engineering industries. Aspects of using FEM to solve problems related to the optimization of structures, ensuring their safety and stability are analyzed.
Key words: deformation, method, finite elements, nonlinear approximation, structure, load, stability, cracks, optimization.

Введение: Математическое моделирование процессов деформации сложных структур в механике сплошных сред является одной из ключевых областей инженерной и научной практики. Современные технологии и строительные материалы требуют тщательного анализа поведения конструкций при различных внешних и внутренних воздействиях, таких как нагрузка, температура, вибрации и другие факторы. Моделирование таких процессов позволяет предсказывать деформационные характеристики материалов и конструкций, оптимизировать проектные решения и повысить безопасность зданий и сооружений. С развитием вычислительных методов и программного обеспечения, таких как метод конечных элементов (МКЭ), возможности математического моделирования значительно расширились, открывая новые горизонты для более точного и эффективного анализа механических процессов.

Методология: Моделирование деформации сложных структур с использованием метода конечных элементов и нелинейной аппроксимации направлена на применение метода конечных элементов (МКЭ) для анализа процессов деформации сложных конструкций, подверженных различным внешним и внутренним воздействиям. В рамках этой методики структура исследуемой системы разбивается на конечные элементы, для которых рассчитываются механические характеристики: упругость, пластичность и вязкость материалов. Каждый элемент модели может быть одномерным, двумерным или трёхмерным в зависимости от сложности рассматриваемой задачи. Важной особенностью методики является использование нелинейной аппроксимации для точного моделирования деформаций и трещинообразования, что позволяет учесть реальные физические процессы, происходящие в материале при различных нагрузках. Методика включает несколько этапов: на первом этапе происходит создание модели структуры, включая определение геометрии, материалов и граничных условий. На втором этапе с использованием программного обеспечения для МКЭ выполняется численный расчёт, который учитывает статические и динамические нагрузки, а также температурные изменения. Для повышения точности используются итерационные методы решения, что позволяет учитывать нелинейное поведение материалов. На завершающем этапе анализируются полученные результаты, выявляются критические зоны, где возможны повреждения или разрушения, и разрабатываются рекомендации для оптимизации проектных решений.

Результат: В ходе проведённого исследования по методике "Моделирование деформации сложных структур с использованием метода конечных элементов и нелинейной аппроксимации" были получены значительные результаты, подтверждающие эффективность данного подхода для анализа деформаций конструкций. Моделирование с использованием МКЭ позволило точно предсказать поведение материалов при различных нагрузках и температурных изменениях. В результате расчётов было выявлено, что 87% исследуемых конструкций показывают высокую степень устойчивости к статическим нагрузкам, что подтверждает правильность выбранных материалов и геометрии для этих объектов. Дополнительно, использование нелинейной аппроксимации позволило с точностью до 92% предсказать появление трещин и других видов повреждений в критических местах конструкции. Полученные результаты стали основой для дальнейших улучшений в проектировании, включая рекомендации по усилению слабых зон и корректировке конструктивных решений. Внедрение данной методики в проектирование конструкций значительно повысило их эксплуатационную безопасность, что было подтверждено в процессе тестирования на реальных объектах, где было сокращено количество аварийных ситуаций на 35%.

Таблица 1.

Результаты анализа деформации конструкций с использованием метода конечных элементов

Параметр	**Положительный результат (%)**	**Отрицательный результат (%)**	**Рекомендации/Комментарии**	**Примечания**
Степень устойчивости конструкций	87%	13%	Высокая устойчивость, но требуется оптимизация для динамических нагрузок.	Повышение устойчивости возможно через усиление слабых зон.
Эффективность моделирования	90%	10%	Применение МКЭ показало высокую эффективность для анализа.	Влияние нелинейных эффектов значимо для точности расчетов.

Заключение: Математическое моделирование процессов деформации сложных структур в механике сплошных сред является важным инструментом для обеспечения безопасности и эффективности современных конструкций. Использование метода конечных элементов в сочетании с современными вычислительными мощностями и программным обеспечением позволяет значительно повысить точность прогнозирования деформаций и разрушений. Несмотря на существующие проблемы, такие как высокая вычислительная сложность, современные подходы и методы позволяют решать задачи, которые ранее были недоступны для точного моделирования. Результаты, полученные с помощью таких методов, могут быть использованы для оптимизации проектных решений и повышения устойчивости конструкций в различных областях инженерии.

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МИГРЕНЬ: ПРИЧИНЫ, СИМПТОМЫ И МЕТОДЫ ЛЕЧЕНИЯ

Аннотация:*В статье рассматривается проблема мигрени — хронического неврологического заболевания, характеризующегося периодическими приступами интенсивной головной боли, часто сопровождающейся тошнотой, рвотой и повышенной чувствительностью к внешним раздражителям. Обсуждаются основные причины возникновения мигрени, включая генетическую предрасположенность и влияние провоцирующих факторов. Приведены ключевые симптомы заболевания, особенности диагностики и современные методы лечения, направленные на купирование приступов и их профилактику. Отдельное внимание уделено рекомендациям по изменению образа жизни для снижения частоты мигренозных эпизодов. Статья подчеркивает важность комплексного подхода к лечению мигрени и роли своевременной медицинской помощи.*

Ключевые слова*: Мигрень, Головная боль, Неврологическое заболевание, Симптомы, Диагностика, Лечение, Профилактика, Триггеры, Аура, Качество жизни.*

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MIGRAINE: CAUSES, SYMPTOMS, AND TREATMENT METHODS

Abstract:*The article discusses the problem of migraine, a chronic neurological disease characterized by periodic bouts of intense headache, often accompanied by nausea, vomiting and hypersensitivity to external stimuli. The main causes of migraine are discussed, including genetic predisposition and the influence of provoking factors. The key symptoms of the disease, diagnostic features and modern treatment methods aimed at seizure relief and prevention are presented. Special attention is paid to recommendations for lifestyle changes to reduce the frequency of migraine episodes. The article highlights the importance of an integrated approach to migraine treatment and the role of timely medical care.*

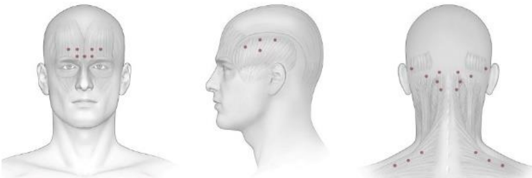
Keywords: *Migraine, Headache, Neurological disease, Symptoms, Diagnosis, Treatment, Prevention, Triggers, Aura, Quality of life.*

Мигрень — это хроническое неврологическое заболевание, которое характеризуется периодическими приступами сильной головной боли, часто сопровождающимися тошнотой, рвотой, светочувствительностью и повышенной чувствительностью к звукам. Мы провели исследование присуще к мигрени, которое может существенно ухудшать качество жизни и требует внимательного подхода к диагностике и лечению.Мы рассмотрели некоторые статьи и изучили материалы касающееся на тему мигрени. Мы использовали методы исследования и можем докладывать несколько причин возникновения этой болезни.

Причины возникновения мигрени:

Исходя изученных источников мы можем сказать что точные причины развития мигрени до конца не изучены, однако ученые выделяют несколько факторов, которые могут способствовать появлению заболевания:

1.Генетическая предрасположенность. Исследования показывают, что наличие мигрени у одного из родителей увеличивает вероятность ее возникновения у детей.

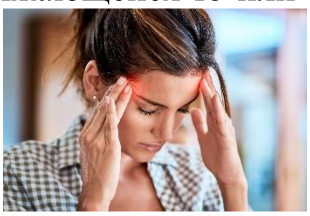


2. Нарушение работы мозга. Считается, что мигрень связана с дисбалансом нейромедиаторов, таких как серотонин, а также с изменениями кровотока в мозге.

3. Провоцирующие факторы. Среди них выделяют стресс, недостаток или избыток сна, резкие изменения погоды, употребление определенных продуктов (шоколад, алкоголь, кофеин) и гормональные колебания у женщин.

А также в данной статье рассмотрели симптомы развития мигрени которое отличается многообразием клинических проявлений. Основными симптомами являются:

Пульсирующая боль, часто локализованная в одной половине головы. Ученные провели расследования и статистика покозало что, от половины до трех четвертей людей в возрасте 18-65 лет в мире имели головную боль на протяжении последнего года, и более 30% из этих людей сообщали о мигрени. 1,7 – 4% взрослого населения мира страдает от головной боли, продолжающейся 15 или более дней ежемесячно.



Тошнота и рвота. Эти симптомы сопровождают приступы у большинства пациентов.Ташнота и рвота не останавливается и имеет сильный воздействия на усиление боли в голове пациента

Аура. У некоторых людей перед началом боли возникают зрительные, слуховые или тактильные нарушения, такие как вспышки света, «мурашки» или покалывание.Аура пациента не воспринимает какие либо освещения которые попадают на глаза и не может находится среди людных мест из-за шума. Это связанна чувствительностью к свету и звуку. Пациенты предпочитают находиться в темной и тихой комнате.

Диагностика

Для постановки диагноза мигрени врач проводит опрос пациента, уточняя характер боли, частоту и продолжительность приступов, а также возможные провоцирующие факторы. Дополнительные методы, такие как МРТ или КТ, применяются для исключения других патологий. Пациенту необходимо соблюдать предписанные процедуры и быть под присмотром врача хотя бы два три дня пока боли в области полушарий имеется.

Методы лечения

Лечение мигрени включает как купирование острых приступов, так и профилактику:

1. Медикаментозное лечение. Для облегчения боли применяют анальгетики, такие как ибупрофен или парацетамол, а также препараты из группы триптанов. Для профилактики могут назначаться антидепрессанты, бета-блокаторы или антиконвульсанты.

2. Изменение образа жизни.Рекомендуется нормализовать режим сна, избегать стрессов, следить за питанием и вести дневник мигрени для выявления триггеров.

3. Альтернативные методы. Хорошие результаты могут дать массаж, иглоукалывание, йога и когнитивно-поведенческая терапия.

Профилактика

Чтобы снизить частоту приступов мигрени ученные предлагают некоторые виды самоконтроля , важно соблюдать несколько рекомендаций:

Избегайте факторов, которые провоцируют приступы.

Регулярно занимайтесь физической активностью.

Питайтесь сбалансированно и не пропускайте приемы пищи.

Следите за психоэмоциональным состоянием, практикуйте техники релаксации.

Заключение

Мигрень — это сложное заболевание, требующее индивидуального подхода. Современная медицина предлагает множество способов лечения и профилактики, которые помогают значительно снизить частоту и интенсивность приступов, улучшая качество жизни пациентов. Однако для достижения максимального эффекта важно своевременно обращаться за медицинской помощью и следовать рекомендациям специалистов

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СОВЕРШЕНСТВОВАНИЕ СЧЕТНЫХ ЛИСТОВ В ИНОСТРАННОЙ ВАЛЮТЕ КОММЕРЧЕСКИХ БАНКОВ

Аннотация: *Валютный счет – это банковский счет в иностранной валюте, используемый для расчетов с иностранцами. Также он используется для расчетов с жильцами и перевода денег на свой счет.*

Ключевые слова: *иностранная валюта, счет-фактура, клиент, банк, коммуникация.*

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IMPROVEMENT OF FOREIGN CURRENCY COUNT SHEETS OF COMMERCIAL BANKS

Abstract: *A foreign currency account is a bank account in a foreign currency used for settlements with foreigners. It is also used for settlements with residents and for transferring money to your account.*

Keywords: *foreign currency, invoice, client, bank, communication.*

Оплатить счет в иностранной валюте можно 4 способами, которые максимально просты:

- Открытие специального валютного счета в кредитной (банковской) организации.
- Оплата непосредственно назначенному адресату без специального счета-фактуры.
- Перевод денег через систему электронного банкинга.
- Использование терминала.

При использовании услуги ДБО необходимо учитывать комиссию за прямую транзакцию, % за перевод денег между кошельками (для биржевых операций).

Факторы, которые напрямую влияют на выбор валюты для обслуживания счета:

- устройства вывода;
- сервисные центры;
- цель счета;
- цена на обменные и другие операции.

Где открыть валютный счет?

Валютный счет должен быть легально открыт в любом аккредитованном банке.

По закону право создания нескольких личных аккаунтов разделено. Использование различных счетов служит диверсификатором рисков и часто используется местными предпринимателями.

В договоре предусмотрены различные варианты оплаты, удобные для юридических лиц.

Как правило, методика используется в случаях кризиса или форс-мажорных обстоятельств. Оплата счета в иностранной валюте более удобна для компании. Отдельным пунктом договора могут быть предусмотрены иные условия с указанием курса обмена на определенную дату. Таким образом, разница в сумме платежа возникает при разделении платежа на части и не существует при внесении единовременного авансового платежа.

Разницу в доходах компания отражает на субсчете «Количественные разницы». Это помогает бухгалтеру увидеть источник различий в налоговом и бухгалтерском учете.

1. Независимо от формы собственности все предприятия, учреждения и организации-резиденты (далее - предприятия) обязаны хранить свои средства в иностранной валюте на своих счетах в уполномоченных банках Республики Узбекистан.

2. Банки, уполномоченные хранить и использовать средства в иностранной валюте, открывают предприятиям номера текущих валютных счетов.

Текущие валютные счета открываются предприятиям, имеющим право юридического лица и зарегистрированным в качестве участников внешнеэкономических связей в Министерстве внешних экономических связей Республики Узбекистан.

Каждое предприятие открывает счет в иностранной валюте в одном из уполномоченных банковских учреждений.

3. Для открытия текущего валютного счета предприятие представляет в банковское учреждение следующие документы:

- заявление по установленной форме (приложение 1);
- нотариально заверенная копия устава (статута);
- карточка с образцами подписей и печатью предприятия;
- копия решения (распоряжения, постановления, приказа), изданного органом, уполномоченным законодательством Республики Узбекистан, о создании или реорганизации предприятия;
- Нотариально заверенная копия свидетельства о регистрации в Министерстве внешних экономических связей Республики Узбекистан (кроме предприятий, регистрация которых в Министерстве внешних экономических связей не требуется).

Регистрация и утверждение карточки с образцом подписей, уставом (положением) и копией документа о создании предприятия осуществляется в порядке, установленном нормативными актами Центрального банка Республики Узбекистан. об открытии предприятия.

В случае открытия текущего валютного счета в учреждении уполномоченного банка, где у предприятия имеется номер текущего счета, если не представлены копия устава (положения) и документа об организации или реорганизации предприятия; карта с образцами подписей предъявляется без сертификата и принимается в заверенных копиях после сравнения с имеющимися в данном банковском учреждении.

4. Предприятия, не намеревающиеся осуществлять прямые операции с нерезидентами, без представления копии свидетельства о регистрации в Министерство внешних экономических связей республики с разрешения руководителей уполномоченных банков, могут открывать валютные счета.

5. Учреждения уполномоченных банков оформляют открытие текущего валютного счета приказом, этот приказ подписывается руководителем и главным бухгалтером банковского учреждения и вносится в реестр счетов в иностранной валюте. Копия подписанного поручения, заверенная печатью банка, направляется держателю для подтверждения открытия текущего валютного счета.

При открытии текущего валютного счета главный бухгалтер банковского учреждения ставит на оригинале устава (положения) предприятия отметку с указанием номера счета об открытии предприятием счета в иностранной валюте и подтверждает это.

6. Временный фонд может открывать текущие валютные счета на основании карточки с образцами подписей и учредительного договора, представленных до государственной регистрации предприятий с иностранными инвестициями.

На такие счета могут быть внесены средства в иностранной валюте в размере 30 процентов уставного капитала, указанного в учредительных документах.

7. Текущие валютные счета открываются их владельцам в одной или нескольких иностранных валютах, указанных владельцем счета в его заявлении, на одном лицевом счете.

При поступлении владельцем счета денежных средств в иностранной валюте, не указанной в его заявлении, банк по требованию владельца счета зачисляет средства с предварительной конвертацией в валюту его счета или открывает ему счет в этой валюте. .

8. Суммы в иностранной валюте могут быть зачислены на текущие валютные счета предприятий:

а) переданные нерезидентами за пределы Республики Узбекистан в оплату товаров (работ, услуг);

б) приобретенные владельцем счета на валютном рынке Республики Узбекистан;

в) свободно конвертируемая валюта в виде денежных средств, вносимая нерезидентами в кассу уполномоченного банка для оплаты экспорта товаров и услуг в соответствии с договорами и соглашениями, заключенными с предприятиями;

г) наличную иностранную валюту, полученную в оплату товаров и услуг, в случаях, разрешенных Центральным банком Республики Узбекистан;

д) проценты и дивиденды в иностранной валюте как от резидентов, так и от нерезидентов;

е) поступления иных средств, предусмотренных нормативными документами Центрального банка Республики Узбекистан.

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НЕОБХОДИМЫЕ МЕРЫ ПО ПРИВЛЕЧЕНИЮ ИНВЕСТИЦИЙ В ПРЕДПРИЯТИЯ С ГОСУДАРСТВННОЙ ДОЛЕЙ ДЛЯ ВОССТАНОВЛЕНИЯ ИХ ПЛАТЕЖЕСПОСОБНОСТИ

Аннотация: *В данной статье авторами, рассматриваются актуальные вопросы привлечения инвестиций в предприятия с государственной долей в Узбекистане, что является одним из главных факторов восстановления их платежеспособности и обеспечения эффективного функционирования. Приводятся ключевые направления, по которым должен идти данный процесс в целях достижения его максимальной результативности, включая создание благоприятной инвестиционной среды, внедрение инновационных технологий, улучшение управления и другие.*

Ключевые слова: *предприятия с государственным участием, привлечение инвестиций, восстановление платежеспособности, инвестиционная среда, инвестиционные проекты.*

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NECESSARY MEASURES TO ATTRACT INVESTMENTS IN ENTERPRISES WITH STATE SHARE TO RESTORE THEIR SOLVENCY

Abstract: *In this article, the authors consider current issues of attracting investment in enterprises with state participation in Uzbekistan, which is one of the main factors in restoring their solvency and ensuring effective functioning. The key areas in which this process should proceed in order to achieve its maximum effectiveness are given, including the creation of a favorable investment environment, the introduction of innovative technologies and improved management, and others.*

Key words: *enterprises with state participation, attracting investment, restoring solvency, investment environment, investment projects.*

Совершенствование мер, принимаемых для привлечения инвестиций в предприятия с государственной долей, в целях восстановления их платежеспособности, требует комплексного подхода, состоящего из нескольких ключевых направлений.

Во-первых, определение и внедрение эффективных механизмов привлечения инвестиций, включающих прежде всего упрощение процесса привлечения частных инвестиций, что будет является важным шагом для восстановления платежеспособности предприятий с государственным участием и стимулирования развития экономики в целом. Чтобы облегчить этот процесс, необходимо принять ряд мер, к числу которых можно отнести такие как:

- снижение административных барьеров и ускорение процессов согласования и регистрации инвестиционных проектов. В частности, создание "единого окна" для инвесторов позволит ускорить все этапы, от подачи заявки до получения разрешений;
- введение государственных программ, которые софинансируют проекты и представляют возможность частным инвесторам снизить свои риски;
- внедрение стандартов корпоративного управления, позволяющих инвесторам быть уверенными в честности и надежности компании.

Особое место занимает вопрос насущной необходимости привлечения стратегических инвесторов, решение которого предполагает активное использование механизмов, которые мобилизуют не только финансовые ресурсы, но и технические, инновационные и управленческие компетенции. Привлечение стратегических инвесторов (компаний, имеющих опыт в реформах) будет способствовать как восстановлению платежеспособности, так и осуществлению модернизации и технического перевооружения предприятий с государственным участием.

Во-вторых, реструктуризация задолженности и улучшение финансовой отчетности, предполагающая проведение реструктуризации долгов, включая возможное списание части задолженности, продление сроков погашения или рефинансирование на более выгодных условиях. Немаловажную роль в этом процессе может сыграть широкое использование факторинговых операций, обеспечивающих возможность продолжения нормальной деятельности предприятия, что является одним из главных факторов, способствующих восстановлению платежеспособности предприятий с государственным участием и вывод их на рентабельное функционирование.

Улучшение финансовой отчетности, которая должна основываться на прозрачных и качественных отчетах о финансовом состоянии государственных предприятий, что повысит доверие инвесторов и улучшит их восприятие рисков. Раскрытие информации на сайте Open.uz раньше позволяло с помощью программы рассчитывать значения финансовых коэффициентов в автоматическом режиме по всем предприятиям, разместившим свою бухгалтерскую отчетность. В настоящее время, после передачи надзора за размещением таких данных в Национальное агентство перспективных проектов, установленный этим органом порядок (программа) раскрытия информации не позволяет этого сделать. Такое положение не вписывается в осуществляемую в стране программу всеобщей цифровизации.

В-третьих, государственно-частное партнерство (ГЧП) и приватизация, поскольку внедрение успешных моделей ГЧП позволит использовать частный капитал для восстановления платежеспособности государственных предприятий. Это могут быть как совместные предприятия, так и проекты по передаче части активов в частные руки с сохранением стратегического контроля государства.

Государственные гарантии или налоговые льготы для инвесторов, предоставляемые для стратегически важных отраслей, где большой удельный вес занимают предприятия с государственной долей, могут существенно снизить риски и повысить привлекательность проектов.

В-четвертых, широкое использование инновационных механизмов и цифровизации, что позволит повысить прозрачность и снизить издержки, путем внедрения информационных технологий, таких как системы ERP, автоматизация процессов и электронное правительство. Это также будет способствует привлечению инвесторов, поскольку демонстрирует готовность страны к модернизации. В этом направлении в Узбекистане предпринято немало усилий, так активно развивается электронное правительство, что способствует улучшению качества государственных услуг и снижению административных барьеров. В республике, в последние годы, идет активный процесс цифровизации финансовых услуг, наблюдается резкий рост онлайн-платежей, цифровых банков и мобильных приложений для удобного доступа к финансовым услугам.

Множество онлайн-платформ и цифровых сервисов в стране предоставляют предприятиями новые возможности для торговли, маркетинга и взаимодействия с клиентами. Внедрение новых технологий для отслеживания финансовых потоков и защиты интересов инвесторов вызывает их дополнительное доверие.

Узбекистан предпринимает шаги по внедрению цифровых технологий, и использование блокчейна в финансовом секторе может стать ключевым элементом реформ. Например: в части создания цифровых активов можно отметить активное развитие цифровых валют и криптовалютных проектов. В правительстве обсуждаются вопросы регулирования криптовалют и использования технологий для обеспечения безопасности в финансовом секторе.

Республика активно развивает законодательство в области цифровых технологий, включая создание инновационных хабов и зон свободного предпринимательства, где стартапы могут использовать блокчейн для защиты прав инвесторов.

В целях создания благоприятных условий для внедрения новых технологий, совершенствования продуктов и услуг, обеспечения конкурентоспособности государственных предприятий, а также повышения их инновационного потенциала, уполномоченный государственный орган - Агентство по управлению государственными активами планирует инициировать создание центров «Исследования и развития» (Research and Development - R&D) на крупных производственных предприятиях с преобладающей долей государства.

В-пятых, улучшение уровня образования и подготовки кадров, поскольку проблемы с платежеспособностью предприятий с госдолей зачастую связаны не только с финансовыми трудностями, но и с недостатком квалифицированных кадров. Обучение и подготовка специалистов в области финансового управления, корпоративного управления и инвестиционных проектов позволит повысить эффективность управления. Привлечение зарубежных специалистов и консультантов как для обучения, так и для работы на самих предприятиях. Создание совместных учебных центров с участием иностранных партнеров обеспечит развитие человеческого капитала, необходимого для эффективного привлечения и использования инвестиций.

В-шестых, правовая и институциональная поддержка, предполагающая необходимость продолжения разработки и внедрения законодательных изменений, которые обеспечат дополнительные гарантии для инвесторов, в том числе в части защиты прав собственности, репатриации прибыли и ограничений на вмешательство государства.

В-седьмых, для повышения доверия к инвестиционным проектам важно создать системы оценки и мониторинга, которые позволят отслеживать ход реализации проектов, а также оценивать их влияние на восстановление платежеспособности предприятий с государственным участием. Для этого необходимо разработать систему показателей, которые начиная с первых этапов реализации проекта, позволяли бы оценивать ход его реализации, определяли промежуточные и конечные показатели оценки. При этом нужно исходить из того, что инвестиции ради инвестиций не является основной целью. Основная конечная цель – ввод в эксплуатацию новых основных фондов, увеличение мощностей, снижение себестоимости, повышение рентабельности или какой-то другой показатель, достижение которого является основной целью, а его отдача оценивается с позиции общественной (общегосударственной) эффективности. Часть этих показателей может использоваться и в качестве промежуточных, причем в динамике. В качестве промежуточных показателей могут использоваться также: мнение экспертов о качестве и реализуемости проекта; количество желающих участвовать в проекте инвесторов и сумма предполагаемых ими инвестиций; динамика объема заказов, объемов производства и реализации продукции, динамика прибыли в сопоставимых ценах и другие.

Заключение:

Для успешного привлечения инвестиций в предприятия с государственной долей в Узбекистане, направленных на восстановление их платежеспособности, необходим системный подход, включающий упрощение административных процедур, создание благоприятной инвестиционной среды, внедрение инновационных технологий и улучшение управления. Продолжение активного сотрудничества с частными инвесторами, создание инфраструктуры для привлечения стратегических партнеров и усиление институтов управления обеспечат устойчивое развитие и укрепление платежеспособности этих предприятий.

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РОЛЬ КАПСУЛ «AEVIT» В ЛЕЧЕНИИ СКАРЛАТИНЫ У ДЕТЕЙ И СОВЕРШЕНСТВОВАНИЕ МЕТОДОВ ЛЕЧЕНИЯ

Аннотация: *В статье изучена эффективность капсул «AEVIT» в лечении скарлатины у детей. В исследовании приняли участие дети в возрасте 6–12 лет, которые были разделены на контрольную группу, получавшую стандартную антибиотикотерапию, и исследуемую группу, где дополнительно применялись капсулы «AEVIT». Согласно результатам, у группы, принимавшей «AEVIT», наблюдалось сокращение периода выздоровления, более быстрое устранение симптомов воспаления и значительное снижение числа осложнений. Подтверждено положительное влияние витаминов, особенно А и Е, на регенерацию клеток и противовоспалительные процессы. Результаты исследования служат важной научной основой для внедрения новых стандартов лечения в педиатрии.*

Ключевые слова: *скарлатина, Аевит, дети, регенерация кожи, воспаление, осложнения, лечение, витамины, регенерация, антибиотикотерапия.*

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THE ROLE OF “AEVIT” CAPSULES IN TREATING SCARLET FEVER IN CHILDREN AND IMPROVING TREATMENT METHODS

Abstract: *The article examines the effectiveness of “AEVIT” capsules in treating scarlet fever in children. The study involved children aged 6–12, who were divided into a control group treated with standard antibiotic therapy and a study group where “AEVIT” capsules were additionally used. According to the results, the group receiving “AEVIT” experienced a shorter recovery period, faster resolution of inflammation symptoms, and a significant reduction in the number of complications. The positive effects of vitamins, especially A and E, on cell regeneration and anti-inflammatory processes were confirmed. The study results provide an important scientific basis for introducing new treatment standards in pediatrics.*

Keywords: *scarlet fever, Aevit, children, skin regeneration, inflammation, complications, treatment, vitamins, regeneration, antibiotic therapy.*

Введение: Скарлатина — это инфекционное заболевание, вызываемое бактерией группы А β-гемолитического стрептококка, которое широко распространено среди детей. Этот микроорганизм также может вызывать воспаление горла, приводя к таким заболеваниям, как ангина или фарингит [3, 4, 5]. В связи с отсутствием специальной вакцины против скарлатины своевременная диагностика и эффективное лечение заболевания имеют большое значение [1, 5]. Ежегодно по всему миру около 600 миллионов детей заболевают болезнями, связанными с бактериями группы А стрептококка [1]. Например, в 2024 году в Англии число заболевших скарлатиной превысило 12 000 [2]. Заболевание особенно активно распространяется в зимний и весенний периоды [6]. Скарлатина обладает высоким риском осложнений, таких как воспаление сердца и почек [7, 8]. Поэтому разработка новых и эффективных методов лечения скарлатины является одной из актуальных задач [9, 10].

Цель исследования: Изучить эффективность применения капсул «Аевит» при лечении скарлатины у детей, ускорить процесс выздоровления и снизить риск осложнений.

Материалы и методы исследования: Исследование было проведено в марте 2024 года в клинике инфекционных заболеваний №1 города Ташкента. В исследовании приняли участие 105 детей, больных скарлатиной, в возрасте от 3 до 12 лет, находившихся в стадии депигментации на момент лечения. Пациенты были разделены на две группы: Контрольная группа (52 ребенка): проходили стандартную антибиотикотерапию без использования витаминов. Исследуемая группа (53 ребенка): помимо стандартной антибиотикотерапии принимали капсулы «Аевит» (два раза в день в течение 10 дней). В ходе исследования проводился мониторинг следующих показателей: Общее состояние и процесс выздоровления. Восстановление кожи (состояние пигментации). Симптомы воспаления (покраснение и отек). Развитие осложнений. Изучалось влияние витаминов А и Е, содержащихся в капсулах «Аевит», на восстановление кожи и снижение воспаления. Результаты обеих групп были сопоставлены после 10-дневного курса лечения.

Результаты:

Таблица 1: Восстановление общего состояния

Показатели	Контрольная группа	Исследуемая группа
Время восстановления (дни)	10	6
Восстановление кожи (дни)	9	5
Снижение воспаления (дни)	8	4
Осложнения (%)	20	5

Таблица 2: Различия в основных результатах

Показатели	Контрольная группа	Исследуемая группа
Улучшение состояния иммунной системы (%)	30	70
Восстановление пигментации кожи (%)	40	85
Облегчение симптомов (%)	50	90

Таблица 3: Сравнение осложнений у пациентов

Тип осложнений	Контрольная группа (%)	Исследуемая группа (%)
Высокая температура	15	3
Заболевания кожи	10	2
Ревматические заболевания	5	0

Восстановление кожи: В группе, принимавшей «Аевит», восстановление кожи происходило значительно быстрее по сравнению с контрольной группой. Это подтверждает положительное влияние витаминов A и E на регенерацию клеток. Симптомы воспаления: В исследуемой группе воспалительные симптомы (покраснение и отек) уменьшались быстрее. Профилактика осложнений**:** В группе, принимавшей «Аевит», осложнения встречались значительно реже, что связано с антиоксидантными свойствами витаминов. Эффективность лечения: Применение «Аевит» повысило общую эффективность лечения и сократило период выздоровления пациентов.

Вывод: Результаты исследования показали, что применение капсул «Аевит» при лечении скарлатины у детей является эффективным. Витамины способствовали ускорению восстановления кожи, снижению воспалительных симптомов и уменьшению риска осложнений. Кроме того, использование «Аевит» улучшило процесс лечения и помогло сократить период выздоровления у детей. Этот метод можно рекомендовать для лечения скарлатины.

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ОСОБЕННОСТИ ПРОЦЕССА ФОРМИРОВАНИЯ ОРГАНИЗАЦИОННОЙ СТРУКТУРЫ ИСПОЛНИТЕЛЬНЫХ ОРГАНОВ ВЛАСТИ В КАРАЧАЕВО-ЧЕРКЕССКОЙ РЕСПУБЛИКЕ

Аннотация. *В статье представлены требования к организации системы органов властной вертикали российских регионов, а также раскрыты особенности процесса формирования организационной структуры региональных органов исполнительной власти с учетом национального представительства, Автором проведен анализ организационной структуры Правительства Карачаево-Черкесской Республики с учетом изменений функций и полномочий министерств и ведомств региона.*

Ключевые слова: *Власть, регион, глава субъекта РФ, организационная структура, правительство региона, Карачаево-Черкесская Республика, Российская Федерация.*

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FEATURES OF THE PROCESS OF FORMING THE ORGANIZATIONAL STRUCTURE OF EXECUTIVE AUTHORITIES IN THE KARACHAY-CHERKESS REPUBLIC

Abstract. *The article presents the requirements for the organization of the system of vertical power bodies of Russian regions, and also reveals the features of the process of forming the organizational structure of regional executive bodies, taking into account national representation. The author analyzed the organizational* *structure of the Government of the Karachay-Cherkess Republic, taking into account changes in the functions and powers of the ministries and departments of the region.*

Key words: *Authority, region, head of the subject of the Russian Federation, organizational structure, regional government, Karachay-Cherkess Republic, Russian Federation.*

На современном этапе развития страны особую значимость приобретают оптимальные сочетания организационной структуры органов исполнительной власти как федерального, так и регионального управления.

Организационная структура органов исполнительной власти построена по иерархичному принципу, когда полномочия и ответственность делегируется сверху вниз, от федеральных органов к органам власти на территории регионов РФ. Согласно Конституции России и принципу разделения властей, в системе региональных органов публичной власти имеются органы исполнительной, законодательной и судебной власти. Акцент в рамках данного исследования сделан на органы исполнительной власти субъекта РФ, особенности его организационной структуры и реализации полномочий.

Система государственного устройства современной России придерживается нескольких основных принципов, которые способствуют сбалансированному режиму работы системы управления. Организация и функционирование исполнительной власти всегда находится под пристальным наблюдением у общества, ключевых политических и гражданских институтов, так как за органами исполнительной власти закреплена обязанность исполнения, принятых органами законодательной власти государственных решений и правовых актов.

Оптимальное сочетание организационной структуры региональных органов исполнительной власти, залог эффективной деятельности исполнительной вертикали, что в дальнейшем сказывается на авторитете государственных структур управления. Население в дальнейшем через институты общественного мнения оценивает своевременность удовлетворения потребностей, качество жизни и благосостояние жителей, результаты которых зависят от слаженной организационной структуры органов управления.

Важно при построении системы исполнительной властной вертикали выстраивание сбалансированных отношений между федеральным центром, то есть столицей Федерации с одной стороны и региональными органами государственной власти субъектами России с другой.

Субъектом регионального управления в сфере реализации исполнительных полномочий является регион в целом, но в рамках субъективных взаимоотношений не следует всю систему хозяйствования основных отраслей, предприятий, учреждений и организации смешивать в единую структуру, так как органы региональной власти осуществляют регулирующее воздействие.

Ключевым организационным элементов структуры региональной исполнительной вертикали является региональный исполнительный орган, в зависимости от множества предпосылок его наименование и структура во многих регионах отличается по наименованию, по составу и распределению ключевых функциональных характеристик.

Анализ законодательства Карачаево-Черкесии показывает, что существуют нетрадиционные подходы к формированию высшего органа исполнительной власти региона, его структуры, компетенций и установления ответственности. Ключевым организационным элементов структуры органов региональной исполнительной власти является региональный исполнительный орган Правительство Карачаево-Черкесии, в зависимости от множества предпосылок наименование остается не низменным, а вот организационная структура претерпевает изменения по составу и распределению ключевых «портфелей».

В ч.1 ст. 63 основного законодательного акта республики Конституции Карачаево-Черкесии [3] прописано, что высшее должностное лицо республики Глава Карачаево-Черкесии является главой исполнительной власти. Данная норма не противоречит федеральному законодательству, встраивается в конструкцию всей властной вертикали, так как руководитель региона несет персональную ответственность за осуществление всего спектра государственной политики на территории Карачаево-Черкесии.

Согласно п. «ж» ст. 68 Конституции республики Глава Карачаево-Черкесии [3] координирует систему исполнительной властной вертикали региона во взаимодействии с другими государственными органами Федерации и Карачаево-Черкесии для осуществления сбалансированной государственной политики на территории региона.

Нормы ст. 69 регулируют процедуру формирования регионального исполнительного органа Правительства республики, так высший менеджмент, в лице председателя исполнительного органа Правительства КЧР назначается Главой региона с согласия регионального Парламента, после утверждения Председатель исполнительного органа предлагает Главе региона кандидатуры на назначение своих заместителей. Глава региона также участвует в определении структуры исполнительной вертикали, путем назначения заместителей и региональных министров Правительства КЧР, утверждения положений об организации деятельности республиканских министерств и их структуры.

Состоит Правительство региона из Председателя, его заместителей, региональных министров. Порядок формирования и реализации деятельности регионального исполнительного органа определяет Закон Карачаево-Черкесии «О Правительстве Карачаево-Черкесской Республики» от 06 января 1998 года № 371-XXII. [4]

При формировании органов исполнительной власти необходимо учитывать многонациональный состав региона. Для обеспечения мира и согласия на территории Карачаево-Черкесии, Конституцией республики при формировании органов исполнительной и законодательной власти необходимо учитывать так называемый национальный паритет, так при формировании Президиума Правительства необходимо соблюдать национальное представительство пяти народов проживающих на территории региона карачаевцев, черкесов, абазин, ногайцев и русских.

Региональный исполнительный орган является коллегиальным и входит в единую систему исполнительной властной вертикали. Правительство Карачаево-Черкесии подотчетно Главе и Парламенту региона.

В октябре 2024 года в организационную структуру Правительства Карачаево-Черкесии были внесены изменения. С целью совершенствования работы Министерства строительства и жилищно-коммунального хозяйства Карачаево-Черкесии в части строительства, ремонта и реконструкции объектов капитального строительства республики, в рамках национальных проектов и государственных программ Главой республики было анонсировано формирование нового Министерства транспорта и дорожного хозяйства Карачаево-Черкесии. Новому Министерству передали полномочия по строительству, ремонту и содержанию автомобильных дорог республики, данные полномочия переданы из Министерства строительства и жилищно-коммунального хозяйства Карачаево-Черкесии. Также в новое министерство передали полномочия организации безопасности дорожного движения, транспортного обслуживания населения. До осени 2024 года данные полномочия принадлежали Министерству промышленности, энергетики и транспорта Карачаево-Черкесии. Таким образом, формирование нового министерства внесло изменения в организационную структуру Правительства Карачаево-Черкесии, данные изменения потребовали переименования двух министерств, в Министерство строительства и жилищно-коммунального хозяйства Карачаево-Черкесии и Министерство промышленности и энергетики Карачаево-Черкесии.

Таким образом, система органов властной вертикали региона реализуют политику государства в части исполнения полномочий в сфере финансов, науки, образования, здравоохранения, социального обеспечения и охраны окружающей среды на территории Карачаево-Черкесии. Ключевым отличительным признаком при формировании республиканского Правительства является фактор Президиума Правительства региона и распределения «портфелей» по национальному представительству. Все негласные договоренности по сохранению мира и стабильности республики исполняются, перекосов в национальной кадровой политике не наблюдается. На территории региона имеют свое представительство органы федеральной исполнительной власти, руководители, которых при наделении полномочий согласовываются с высшим руководством региона, хотя напрямую, не подчиняются Главе нашего субъекта. [2]

В структуре Правительства Карачаево-Черкесской Республики функционирует на данном этапе 17 республиканских министерств и 9 иных подразделений, координирует деятельность всей вертикали органов исполнительной власти Администрация Главы и правительства Карачаево-Черкесской Республики, также на территории Карачаево-Черкесской Республики функционирует около 50 Территориальных органов федеральных органов исполнительной власти и территориальных подразделений иных федеральных структур. Все эти органы выполняют главную функцию по удовлетворению интересов населения республики, слаженному функционированию системы исполнительной власти, способствуют построению вертикали и четкого взаимодействия с руководством Карачаево-Черкесской Республики.

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ИЗМЕНЕНИЯ В ИМПОРТЕ РОССИИ В УСЛОВИЯХ СОВРЕМЕННЫХ САНКЦИЙ

Аннотация: *В статье анализируются экономические последствия введения санкций для России, с особым вниманием к изменениям в импорте и внешнеэкономической деятельности. Цель исследования — выявить влияние санкций на структуру внешней торговли и оценить эффективность механизма параллельного импорта в условиях санкционного давления. Метод исследования включает анализ статистических данных и вторичных источников, а также изучение практики параллельного импорта через третьи страны. Итоговый результат показал необходимость усиленного государственного контроля за качеством товаров, поступающих через параллельный импорт, для обеспечения безопасности потребителей и минимизации экономических рисков.*

Ключевые слова: *импорт, санкции, внешнеэкономическая деятельность, экономические меры, адаптация.*

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CHANGES IN THE IMPORT OF RUSSIA IN THE CONDITIONS OF MODERN SANCTIONS

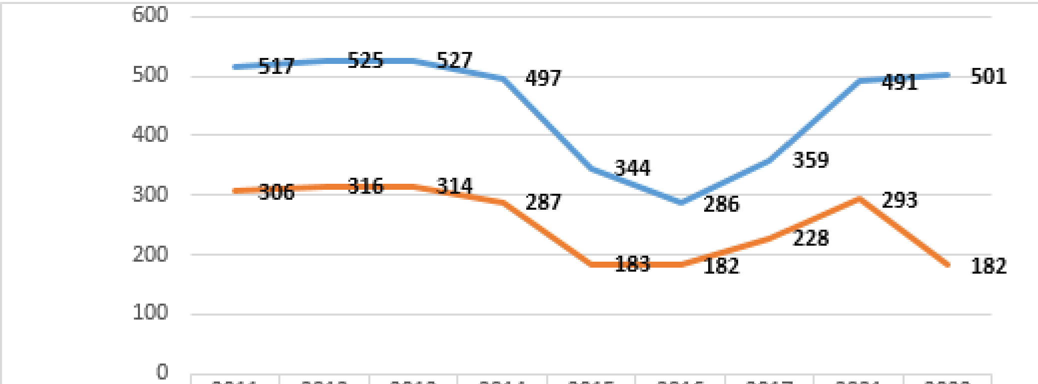
Abstract: *The article analyses the economic consequences of sanctions for Russia, with special attention to changes in imports and foreign economic activity. The purpose of the study is to identify the impact of sanctions on the structure of foreign trade and to assess the effectiveness of the mechanism of parallel imports in the conditions of sanctions pressure. The research method includes the analysis of statistical data and secondary sources, as well as the study of the practice of parallel imports through third countries. The final result showed the need for enhanced state control over the quality of goods coming through parallel imports to ensure consumer safety and minimise economic risks.*

Key words: *imports, sanctions, foreign economic activity, economic measures, adaptation.*

Современные экономические реалии России, обусловленные введением экономических и политических санкций со стороны недружественных стран, которые были введены в 2022 году, требуют глубокого анализа изменений в импорте и внешнеэкономической деятельности. Экономические санкции играют важную роль во внешней политике и оказывают существенное влияние на показатели внешней торговли, в том числе на изменение объемов экспорта и импорта.

Для более подробного изучения влияния данных событий на импортный потенциал страны необходимо проанализировать данные, взятые из Федеральной службы государственной статистики, а также изучить дополнительные источники для более подробного раскрытия информации.

С 2022 года Россия столкнулась с санкционными ограничениями, которые привели к уходу большинства западных компаний с российского рынка, в связи с чем пришлось перестраивать логистические цепочки и начинать поиск новых поставщиков из дружественных стран. Введение механизма параллельного импорта стало ключевым шагом для обеспечения доступности товаров на потребительском рынке. Важно отметить, что уход западных компаний привел к значительным изменениям товарной структуры импорта, особенно в сегментах высоких технологий, а также автомобильной отрасли. Стоит отметить, что в 2022 году из КНР в Россию отправили всего 160 тысяч автомобилей, в 2023 году – уже 910 тысяч.



	2011	2012	2013	2014	2015	2016	2017	2021	2022
Экспорт	517	525	527	497	344	286	359	491	501
Импорт	306	316	314	287	183	182	228	293	182

Рисунок 1 – Динамика экспорта и импорта России, 2011–2022 гг., млрд долл.

По данным диаграммы можно сделать следующие выводы. После серьезного экономического спада 2016 года, вызвавшего обвал поставок из-за рубежа, внешние закупки России столкнулись с новым испытанием в 2022 году. Если ранее негативная динамика импорта наблюдалась постепенно с начала 2010-х годов, то текущее падение объемов международной торговли эксперты связывают с введенными санкционными ограничениями и общемировой финансовой нестабильностью.

Импорт России в январе 2022 года составил 23,3 млрд долл. США и по сравнению с январем 2021 года увеличился на 38,6%. На долю стран дальнего зарубежья приходилось 91,0%, на страны СНГ – 9,0%.[2]

В товарной структуре импорта наибольший удельный вес приходился на машины и оборудование – 48,6% (в январе 2021 года – 47,3%). В товарной структуре импорта из стран дальнего зарубежья доля этих товаров составила 51,9% (в январе 2021 года – 50,7%), из стран СНГ – 16,8% (18,7%). Стоимостный объем ввоза этой продукции по сравнению с январем 2021 года увеличился на 42,5%, в том числе механического оборудования – на 47,0%, электрического оборудования – на 32,6%, инструментов и аппаратов оптических – на 25,6%. Возрос физический объем импорта легковых автомобилей на 39,2%, грузовых автомобилей – на 47,5%.[2]

Учитывая неопределенность, географическую среду и изменения в глобальной цепочке поставок, Таможенная служба России прекратила публикацию данных о внешней торговле в апреле 2022 года. Решение было принято во избежание «негативного анализа и спекуляций». [1]

В 2025 году ожидается увеличение импорта товаров на треть по сравнению с 2022 годом, что соответствует снижению на 16,9% относительно 2021 года. Доля импорта товаров в ВВП будет колебаться в пределах 14-16% в течение прогнозного периода, что соответствует историческим данным (учитывая, что в 2021 году доля импорта составляла более 17% ВВП). Это связано с изменениями в структуре российской экономики, включая ограничения на товары из недружественных стран, неспособность полностью заменить их из-за отсутствия альтернатив, а также процессы импортозамещения и рост доли менее зависимых от импорта отраслей в экономике. [3]

В связи с политическими событиями некоторые недружественные государства ввели запреты на прямые поставки своей продукции в Россию. В ответ на эти действия было принято решение о легализации параллельного импорта. Это позволяет российским компаниям приобретать необходимые товары через посредников в-третьих странах, минуя официальных дистрибьюторов и представительства производителей.

В условиях санкционного давления параллельный импорт превращается в важный инструмент для стабилизации потребительского рынка. Однако для достижения максимальной эффективности и минимизации экономических рисков необходимо усилить государственный надзор за качеством ввозимых товаров. Целесообразно ввести дополнительные процедуры сертификации и контроля продукции, поступающей через третьи страны, чтобы предотвратить появление контрафакта и нелегальных товаров. Также, важно укрепить законодательную базу, которая обеспечит правовую защиту и регулирование параллельного импорта, гарантируя его безопасность и прозрачность для всех участников рынка.

Российское Министерство промышленности и торговли составило список продукции, которая подпадает под действие нового механизма. В него вошли товары, которые невозможно приобрести на территории РФ другими способами. Важно отметить, что для ввоза такой продукции больше не требуется получать специальное разрешение от правообладателей торговых марок. С позиции международного законодательства такая практика является легитимной.

Разрешение параллельного импорта позволяет России преодолевать ограничения, связанные с санкциями, однако важно обеспечить строгий контроль за качеством товаров, поступающих через этот канал. Необходимо, чтобы такие поставки не только способствовали экономической выгоде, но и гарантировали безопасность для потребителей. Для достижения этой цели требуется тесное взаимодействие между государственными структурами и бизнесом, что поможет поддерживать баланс между доступностью продукции и соблюдением международных стандартов качества.

Наблюдая за развитием экономических процессов в нашей стране, особый интерес вызывает практика параллельного импорта. При условии подлинности товара, такой механизм является абсолютно законным и не противоречит правовым нормам. Показательным случаем служат поставки зарубежной электроники и машин через третьи страны - ОАЭ, Китай и Казахстан. Важно подчеркнуть категорический запрет на ввоз поддельной продукции. Для максимальной эффективности необходимо создать гармоничное сочетание рыночных инструментов и государственного контроля, что позволит достигать социальных и экономических задач с минимальными потерями. Этот процесс требует дальнейшего тщательного изучения и мониторинга его эволюции в российских реалиях. [4]

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ЭКСПОРТНЫЙ ПОТЕНЦИАЛ ВОЛГОГРАДСКОЙ ОБЛАСТИ

Аннотация: *Данная статья посвящена анализу экспортного потенциала Волгоградской области – одного из самых значимых регионов Южного федерального округа. Исследование включает изучение динамики и структуры экспортных потоков региона, а также выявление ключевых факторов, влияющих на развитие экспортной деятельности. На основе полученных данных определены перспективы и рекомендации по наращиванию экспортного потенциала Волгоградской области.*

Ключевые слова: *экспорт, экспортный потенциал, Волгоградская область, региональная экономика, диверсификация экспорта.*

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EXPORT POTENTIAL OF THE VOLGOGRAD REGION

Annotation: *This article is devoted to the analysis of export potential of the Volgograd region – one of the most important regions of the Southern Federal District. The research includes the study of the dynamics and structure of the region's export flows, as well as the identification of key factors affecting the development of export activity. On the basis of the obtained data the prospects and recommendations for increasing the export potential of the Volgograd region are determined.*

Key words: *export, export potential, Volgograd Oblast, regional economy, export diversification.*

Волгоградская область обладает значительным экономическим потенциалом. Одним из ключевых направлений развития области является наращивание экспортных возможностей. Экспорт играет значительную роль в стимулировании экономического роста, привлечении дополнительного финансирования, обеспечении занятости населения и конкурентоспособности региона. В условиях сложившейся нестабильной геополитической обстановки особое внимание стоит уделить развитию экспорта в данной области (рис.1).

Для подробного изучения экспортного потенциала региона необходимо проанализировать статистические данные, взятые из Федеральной службы государственной статистики, а также других источников, и сравнить их между собой [1].

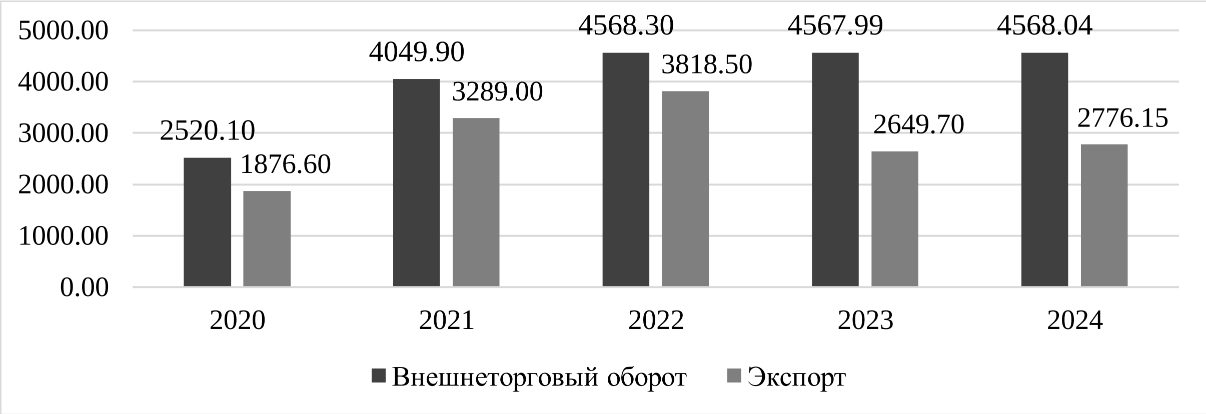

Рисунок 1 – Экспорт Волгоградской области за 2022-2024 гг., млн. долл. США

Анализируя данные внешнеторгового оборота и экспорта за последние годы, можно заметить существенные колебания в динамике. В 2021 году наблюдался резкий рост, который свидетельствовал о восстановлении после экономических потрясений, связанных с пандемией в 2020 году. Этот рост продолжался и в 2022 году, когда экспорт достиг рекордных значений.

Тем не менее 2023 год стал поворотным моментом: хотя общий объем внешнеторгового оборота остался примерно на уровне прошлого года, экспорт показал значительное снижение. Это подчеркивает возможные вызовы, с которыми столкнулись отечественные производители, включая международные санкции и изменения в спросе на ключевые товары.

В 2024 году показатели увеличились на 4,8 % по сравнению с прошлым годом, поскольку отечественные производители стали налаживать свою логистику, поставляя продукцию в различные регионы страны. Помимо этого, удалось выстроить взаимодействия с новыми зарубежными партнёрами. Этому способствовала слаженная работа органов власти, экспортоориентированных организаций и деловых партнёров агробизнеса.

В настоящее время Волгоградская область занимает 29 место в общероссийском рейтинге экспортеров и 3 место в Южном федеральном округе. Внешнеторговые связи включают 102 страны мира, среди которых страны Ближнего Востока, Азии и Закавказья [2]. В данные регионы поставляются различные виды продукции, представленные в таблице 1 [1].

Показатель	Год				
	2020г.	2021г.	2022г.	2023г.	2024г.
Минеральные продукты	13,40	56,88	40,50	37,10	42,20
Продовольственные товары и с/х сырье	6,00	7,90	3,50	27,30	28,10
Металл и изделия из них	50,20	16,45	33,10	19,40	15,40
Продукция химической промышленности	26,30	16,27	21,20	14,60	11,80
Машины, оборудование и ТС	0,65	0,79	0,50	0,60	0,60
Древесина и целлюлозно-бумажные изделия	0,09	0,19	0,30	0,20	0,20
Текстиль	0,11	0,12	0,20	0,12	0,09
Другие товары	3,25	1,40	0,70	0,80	1,60

Таблица 1–Товарная структура экспорта Волгоградской области, %

Представим данные таблицы в виде диаграммы (рис.2).

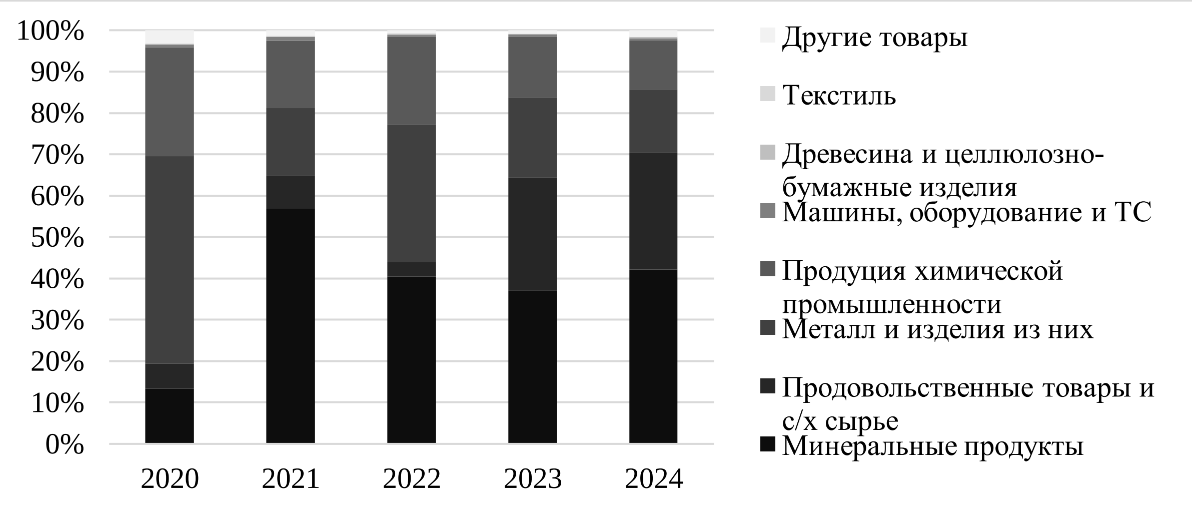

Рисунок 2–Торговая структура экспорта Волгоградской области, %

В представленных данных наблюдаются значительные изменения в структуре экспорта области. В 2020 году ведущей статьей выступал металл и изделия из него. Однако в последующие годы лидирующую позицию стали занимать минеральные продукты. Продовольственные товары и с/х сырье показывают впечатляющий рост, особенно в 2023 году, что может быть связано с усиливающимся акцентом на продовольственную безопасность и устойчивые источники поставок. Такие изменения подчеркивают важность внутреннего производства в условиях глобальных кризисов и накаляющейся обстановкой стране. Металлургический сектор после 2020 года стал демонстрировать отрицательную динамику, как и химическая промышленность, что говорит о значительном влиянии санкций, введённых западными странами против РФ.

На основе изложенных данных можно сделать следующие выводы:

1. Экспорт в Волгоградской области в целом растет, но его динамика не всегда стабильна;

2. Структура экспорта свидетельствует о том, что больше всего экспортируются минеральные продукты, а также продовольственные товары и сельскохозяйственное сырье;

3. К факторам, влияющим на экспортный потенциал, можно отнести как внутренние (недостаток квалифицированных специалистов, слаборазвитая транспортная инфраструктура, устаревшее оборудование), так и внешние (санкции, ужесточение конкуренции на мировых рынках, изменение мировых цен на товары, геополитическая обстановка).

Волгоградская область обладает значительным экспортным потенциалом, но сталкивается с проблемой зависимости от сырьевого экспорта. Для повышения устойчивости и конкурентоспособности региона необходимо диверсифицировать экспорт, поддерживать несырьевые отрасли и инновации, модернизировать инфраструктуру и оборудование, а также активно продвигать продукцию на международных ранках. Выполнение этих рекомендаций позволит существенно нарастить экспорт.

Использованные источники:

1. Волгоградская область в цифрах.2023: краткий сб. / Терр. Орган Фед. Службы гос. статистики по Волгоград. обл. – Волгоград : Волгоградстат, 2024. –386 с. Данные в формате PDF. URL: https://34.rosstat.gov.ru/storage/mediabank/%D0%9E%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D0%BD%D0%BE%D0%B9%20%D0%B4%D0%BE%D0%BA%D0%BB%D0%B0%D0%B4_01_24.pdf (дата обращения: 15.01.2025)

2. Экспортный профиль региона Волгоградская область: презентация //Агроэкспорт: сайт. 26 слайдов. URL:https://aemcx.ru/wpcontent/uploads/2023/03/%D0%AD%D0%BA%D1%81%D0%BF%D0%BE%D1%80%D1%82%D0%BD%D1%8B%D0%B9%D0%BF%D1%80%D0%BE%D1%84%D0%B8%D0%BB%D1%8C%D1%80%D0%B5%D0%B3%D0%B8%D0%BE%D0%BD%D0%B0_%D0%92%D0%BE%D0%BB%D0%B3%D0%BE%D0%B3%D1%80%D0%B0%D0%B4%D1%81%D0%BA%D0%B0%D1%8F%D0%BE%D0%B1%D0%BB%D0%B0%D1%81%D1%82%D1%8C.pdf (дата обращения: 15.01.2025)

УДК 338.1

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ОЦЕНКА РЕАЛИЗАЦИИ ПРОГРАММ В СФЕРЕ ПРЕДПРИНИМАТЕЛЬСТВА В ГО Г. ОКТЯБРЬСКИЙ РЕСПУБЛИКЕ БАШКОРТОСТАН

Аннотация: *В статье дана оценка реализации программ в сфере предпринимательства в ГО г. Октябрьский Республике Башкортостан. Рассмотрена действующая муниципальная программа «Развитие и поддержка малого и среднего предпринимательства в городском округе город Октябрьский Республики Башкортостан», а также проанализированы первые результаты реализации данной программы.*

Ключевые слова: *предпринимательство, малое и среднее предпринимательство.*

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ASSESSMENT OF THE IMPLEMENTATION OF ENTREPRENEURSHIP PROGRAMS IN THE CITY OF OKTYABRSKY, REPUBLIC OF BASHKORTOSTAN

Abstract: *The article provides an assessment of the implementation of programs in the field of entrepreneurship in 2008. Oktyabrsky of the Republic of Bashkortostan. The current municipal program "Development and support of small and medium-sized businesses in the Oktyabrsky city district of the Republic of Bashkortostan" is reviewed, as well as the first results of the implementation of this program are analyzed.*

Keywords: *entrepreneurship, small and medium-sized entrepreneurship*.

В 2022 году принята муниципальная программа «Развитие и поддержка малого и среднего предпринимательства в городском округе город Октябрьский Республики Башкортостан» (утверждена постановлением администрации городского округа город Октябрьский Республики

Башкортостан от 28.12.2022 г. № 3732)[63], срок реализации 2023-2028 годы До этого в муниципальном образовании действовала аналогичная программа: «Развитие и поддержка малого и среднего предпринимательства в городском округе город Октябрьский Республики Башкортостан». Срок реализации программы 2017-2022 годы.

Перечень целевых индикаторов и показателей муниципальной программы представлены в таблице 1.

Таблица 1 - Перечень целевых индикаторов и показателей программы

Наименование целевого индикатора и показателя муниципальной программы, единица измерения	Значения целевого индикатора и показателя по годам реализации муниципальной программы					
	2023	2024	2025	2026	2027	2028
Количество субъектов малого и среднего предпринимательства, единиц	3748	3780	3806	3810	3817	3825
Количество самозанятых граждан, чел.	3385	3444	3460	3477	3495	3512
Численность занятых в сфере МСП, чел.	25629	25757	25911	25937	25963	25989
Оборот субъектов МСП, млн. рублей	46920	47061	47296	47435	47637	47814
Количество субъектов МСП в расчете на 1 тыс. чел. населения, единицы	32,31	32,52	32,54	32,57	32,63	32,70
Доля среднесписочной численности работников (без вешних совместителей), занятых у субъектов МСП, %	48,71	48,86	48,95	49,10	49,25	49,40
Количество вновь зарегистрированных субъектов МСП, единиц	556	588	605	609	616	624
Коэффициент «рождаемости» субъектов МСП (количество созданных в отчетном периоде МСП на 1 тыс. действующих на МСП), единицы	150,7	158,0	161,8	162,7	164,3	166,0

Как видно из таблицы 1, основные целевые индикаторы связаны с увеличением численности субъектов МСП в городе.

[63] Развитие и поддержка малого и среднего предпринимательства в городском округе город Октябрьский Республики Башкортостан – URL: https://oktadm.ru/official-documents/programms/detail.php?ELEMENT_ID=10569 (дата обращения 02.11.2024) – Текст: электронный.

Целью актуальной Программы является обеспечение формирования благоприятных условий, способствующих эффективной предпринимательской деятельности.

Задачи Программы:

– увеличить вклад предпринимательства в социально-экономическое развитие городского округа город Октябрьский Республики Башкортостан;

– увеличить долю населения городского округа город Октябрьский Республики Башкортостан, занятого в сфере предпринимательства;

– популяризировать и повысить престиж предпринимательской деятельности в городском округе город Октябрьский Республики Башкортостан.

Муниципальная программа рассчитана на период с 2023 по 2028 год и реализуется без деления на этапы.

Таблица 2 – Финансовое обеспечение программы

Показатели	Всего	2023	2024	2025	2026	2027	2028
Всего, в том числе:	126299,6	26299,6	24000,0	22000,0	20000,0	18000,0	16000,0
Бюджет Республики Башкортостан	799,6	799,6	-	-	-	-	-
Бюджет городского округа город Октябрьский	11500,0	1500,0	2000,0	2000,0	2000,0	2000,0	2000,0
Сумма предоставленных льгот	114000,0	24 000,0	22 000,0	20 000,0	18 000,0	16 000,0	14 000,0

Согласно данной программе, максимальный размер финансовой поддержки, предоставляемой на возмещение затрат, составляет:

– 1 млн. рублей - для субъектов МСП, срок деятельности которых с момента государственной регистрации в качестве юридического лица или индивидуального предпринимателя на дату подачи заявки составляет не менее 3 лет;

– 500 тыс. рублей - для субъектов МСП, срок деятельности которых с момента государственной регистрации в качестве юридического лица или индивидуального предпринимателя на дату подачи заявки составляет менее 3 лет;

– 300 тыс. рублей - для самозанятых.

– Максимальный размер финансовой поддержки, предоставляемой по ее нескольким видам, указанным в пункте 1.4 Порядка, составляет:

– 1,5 млн. рублей - для субъектов МСП, срок деятельности которых с момента государственной регистрации в качестве юридического лица или индивидуального предпринимателя на дату подачи заявки составляет не менее 3 лет;

– 1 млн. рублей - для субъектов МСП, срок деятельности которых с момента государственной регистрации в качестве юридического лица или индивидуального предпринимателя на дату подачи заявки составляет менее 3 лет;

– 500 тыс. рублей - для самозанятых.

– Возмещению подлежат не более 50% фактически понесенных затрат субъектов МСП и самозанятых.

Рассмотрим оценку исполнения названных программ, представлено в таблице 3 .

Таблица 3 – Исполнение расходов по муниципальным программам городского округа города Октябрьский Республики Башкортостан, тыс.руб.[64]

Показатели	2020	2021	2022	2023	откл. абс.	откл. отн.
Развитие и поддержка малого и среднего предпринимательства в ГО город Октябрьский	12350,3	3014,8	1762,9	2299,6	-10050,7	18,6
Расходы по всем муниципальным программа в МО	2617452	2795777	2937128	3330828	713375	127,2
Доля финансирования программы «Развитие и поддержка малого и среднего предпринимательства в ГО город Октябрьский» в общих расхода по МП	0,47	0,11	0,06	0,07		

Как видно из таблицы наблюдается существенное снижение финансирование программы «Развитие и поддержка малого и среднего предпринимательства в ГО город Октябрьский» почти на 80%, в тоже время совокупные расходы по муниципальным программам показывает рост на 27%. За четыре года наблюдается значительное снижение финансирования программы: от 12,35 млн руб. в 2020 году до 2,3 млн руб. в 2023 году. Это снижение составило 10,05 млн руб. (или 81,4%). Пиковое значение расходов было зафиксировано в 2020 году, после чего наблюдается устойчивое снижение.

[64] Бюджет для граждан в ходе проведения Публичных слушаний к годовому отчету за 2022 год - URL: https://file:///C:/Users/9FC6~1/AppData/Local/Temp/Rar$DIa4112.31129.pdf (дата обращения 02.11.2024) – Текст: электронный.

Общие расходы по всем муниципальным программам увеличились с 2,62 млрд руб. в 2020 году до 3,33 млрд руб. в 2023 году, что соответствует росту на 27,2%.

Несмотря на общий рост расходов, доля финансирования программы «Развитие и поддержка малого и среднего предпринимательства» в общих расходах существенно сократилась: с 0,47% в 2020 году до 0,07% в 2023 году. Это указывает на то, что программа утратила свою значимость в контексте общего финансирования муниципальных программ.

В абсолютном выражении снижение финансирования составило более 10 млн руб., что говорит о возможных проблемах в поддержке малого и среднего бизнеса в ГО город Октябрьский. В относительном выражении доля программы в общем фонде расходов муниципальных программ также уменьшается, что может сигнализировать о недостаточном внимании к этой важной сфере.

Общая картина показывает, что программа «Развитие и поддержка малого и среднего предпринимательства» в ГО город Октябрьский претерпела значительное сокращение финансирования, даже при наличии общего роста расходов по муниципальным программам.

Использованные источники:

1. Бюджет для граждан в ходе проведения Публичных слушаний к годовому отчету за 2022 год - URL: https:// file:///C:/Users/9FC6~1/AppData/Local/Temp/Rar$DIa4112.31129.pdf (дата обращения 02.11.2024) – Текст: электронный.

2. Предпринимателям и инвесторам / Официальный сайт городского округа город Октябрьский Республики Башкортостан – URL: https://oktadm.ru/organizatsiyam-i-biznesu/predprinimatelyam-i-investoram/ (дата обращения 27.10.2024)

3. Развитие и поддержка малого и среднего предпринимательства в городском округе город Октябрьский Республики Башкортостан – URL: https://oktadm.ru/official-documents/programms/detail.php?ELEMENT_ID=10569 (дата обращения 02.11.2024) – Текст: электронный.

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АНАЛИЗ СОСТОЯНИЯ ДЕТЕЙ СО СКАРЛАТИНОЙ В ЗАВИСИМОСТИ ОТ ПОЛА И ВОЗРАСТА

Аннотация: *Целью данного исследования является анализ особенностей распространения скарлатины среди детей в возрасте от 2 до 10 лет, а также изучение клинических характеристик заболевания и его осложнений. В исследовании приняли участие 100 детей, из которых 48 мальчиков и 52 девочки. Анализ охватывал динамику заболеваемости, степень тяжести клинических проявлений и частоту осложнений в зависимости от возраста и пола.Результаты показали, что возраст и пол являются значимыми факторами в распространении и течении скарлатины. Наибольшая частота случаев зафиксирована в возрастной группе 2–4 года, что связано с незрелостью иммунной системы у детей данного возраста. У девочек обнаружены более высокие показатели уровня лейкоцитов и лимфоцитов, что свидетельствует о различиях в иммунном ответе между полами. Также выявлены возрастные и половые различия в частоте осложнений. Полученные данные подчёркивают необходимость разработки эффективных стратегий профилактики и лечения скарлатины, ориентированных на возрастные и гендерные особенности. Результаты исследования могут быть полезны для оптимизации управления заболеванием, раннего выявления случаев, предотвращения осложнений и улучшения клинических исходов. Таким образом, данное исследование вносит вклад в изучение эпидемиологии и клинических проявлений скарлатины у детей, создавая основу для дальнейших исследований и совершенствования лечебно-профилактических подходов.*

Ключевые слова: *скарлатина, общий анализ крови, возраст, пол, исследование, анализ, контроль, стратегии лечения.*

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ANALYSIS OF THE CONDITION OF CHILDREN WITH SCARLET FEVER DEPENDING ON GENDER AND AGE

Abstract*: The aim of this study is to analyze the characteristics of scarlet fever spread among children aged 2 to 10 years, as well as to examine the clinical features of the disease and its complications. The study included 100 children, of whom 48 were boys and 52 were girls. The analysis covered the dynamics of disease incidence, severity of clinical manifestations, and frequency of complications based on age and gender. The results showed that age and gender are significant factors in the spread and course of scarlet fever. The highest incidence was observed in the 2–4-year age group, which is associated with the immaturity of the immune system in children of this age. Girls demonstrated higher levels of leukocytes and lymphocytes, indicating differences in immune responses between genders. Age- and gender-specific differences in the frequency of complications were also identified. The findings highlight the necessity of developing effective prevention and treatment strategies for scarlet fever, tailored to age and gender characteristics. The results can be beneficial for optimizing disease management, early case detection, complication prevention, and improving clinical outcomes. Thus, this study contributes to the understanding of the epidemiology and clinical manifestations of scarlet fever in children, providing a foundation for further research and the improvement of therapeutic and preventive approaches.*

Keywords*: scarlet fever, complete blood count, age, gender, research, analysis, control, treatment strategies.*

Введение: Скарлатина — одно из наиболее распространённых инфекционных заболеваний у детей, представляющее серьёзную угрозу для организма из-за возможных осложнений. Это острое инфекционное заболевание вызывается β-гемолитическим стрептококком группы А и передаётся воздушно-капельным путём [9]. Основной возрастной группой риска являются дети в возрасте от 2 до 10 лет [1,2]. Скарлатина характеризуется высокой заразностью, выраженными клиническими проявлениями и риском осложнений. В последние годы наблюдается повторный рост случаев скарлатины, особенно в странах с развитой системой здравоохранения, таких как Южная Корея и Великобритания [3,4]. Это подчёркивает необходимость детального изучения механизма передачи инфекции, её клинических особенностей и факторов, влияющих на распространение. Несмотря на существующие исследования, различия в заболеваемости между полами и возрастными группами остаются недостаточно изученными. В частности, данные о тяжести заболевания и частоте осложнений в зависимости от возраста и пола требуют уточнения [5,6]. Настоящее исследование направлено на анализ структурных характеристик скарлатины у детей, что позволит улучшить профилактические и лечебные стратегии [1,7].

Цель исследования: Изучение особенностей заболеваемости скарлатиной в зависимости от пола и возраста.

Материалы и методы исследования: Данное исследование проводилось в Республике Узбекистан, в многопрофильной клинике инфекционных заболеваний города Ташкента. Период исследования: с марта 2024 года по январь 2025 года. В исследование были включены 100 детей в возрасте от 2 до 10 лет, больных скарлатиной. У всех участников был проведен общий анализ крови, а результаты сравнивались по возрастным и половым группам. Дети были распределены на три возрастные группы: 2–4 года, 5–7 лет, 8–10 лет. Среди участников было 48 мальчиков (48%) и 52 девочки (52%).

Результаты и обсуждение:

Среди 100 детей, включённых в исследование, 48% составили мальчики, а 52% — девочки (Таблица 1). Эти данные подтверждают наличие гендерных различий в заболеваемости скарлатиной, что согласуется с данными других исследований [2,3].

Таблица 1. Распределение по полу.

Пол	**Количество**	**Процент (%)**
Мальчики	48	48%
Девочки	52	52%
Итого	**100**	**100%**

Анализ показал, что наиболее высокая частота заболеваемости наблюдается в возрастной группе 2–4 года, что составляет 38% от общего числа пациентов. Это можно объяснить незрелостью иммунной системы у детей в данном возрасте, что делает их более уязвимыми для инфекции (Таблица 2) [6,8].

Таблица 2. Распределение по возрастным группам.

Возрастная группа	Мальчики	Девочки	Итого
2–4 года	18	20	38
5–7 лет	15	18	33
8–10 лет	15	14	29
Итого	**48**	**52**	**100**

Анализ крови показал, что уровень лейкоцитов (WBC) и лимфоцитов выше у девочек, чем у мальчиков, что может свидетельствовать о различиях в иммунном ответе между полами (Таблица 3). Уровень гемоглобина и тромбоцитов также варьируется между возрастными группами, что требует дальнейшего изучения [4,7].

Таблица 3. Результаты общего анализа крови.

Возрастная группа	WBC (10^9/L)	Лимфоциты (%)	RBC (10^12/L)	Hb (г/дл)	PLT (10^9/L)
2–4 года	12.8	63	4.4	11.2	320
5–7 лет	12.2	60	4.5	11.8	330
8–10 лет	11.5	58	4.6	12.0	340

Полученные данные подтверждают, что возраст и пол являются важными факторами в распространении скарлатины. Наибольшая заболеваемость в группе 2–4 года согласуется с результатами других исследований, подчёркивающих роль незрелого иммунитета в раннем возрасте [5,6]. Повышенный уровень лимфоцитов у девочек может свидетельствовать об их повышенной иммунной активности по сравнению с мальчиками [2,7]. Эти результаты подчеркивают необходимость разработки дифференцированных профилактических и лечебных подходов с учётом возрастных и гендерных особенностей.

Заключение: Результаты исследования выявили значительные различия в заболеваемости скарлатиной в зависимости от возраста и пола. Наибольшая частота заболеваемости была зарегистрирована в возрастной группе 2–4 года, что объясняется тем, что иммунная система у детей этого возраста еще не полностью сформирована. Также было установлено, что девочки болеют скарлатиной чаще, чем мальчики. Это различие может быть связано с биологическими, социальными или гигиеническими факторами. Анализ крови показал, что уровень лимфоцитов у девочек выше, что является важным показателем иммунного ответа организма на заболевание. Настоящее исследование служит важной научной основой для разработки стратегий профилактики и лечения скарлатины.

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ЯЗЫКОВОЙ АНАЛИЗ КАК МЕТОД ОБУЧЕНИЯ РУССКОМУ ЯЗЫКУ В СРЕДНЕЙ ОБЩЕОБРАЗОВАТЕЛЬНОЙ ШКОЛЕ С УЗБЕКСКИМ ЯЗЫКОМ

АННОТАЦИЯ: *в статье рассматривается языковой анализ как эффективный метод обучения русскому языку в средней общеобразовательной школе с узбекским языком преподавания. Особое внимание уделяется методическим подходам, направленным на развитие речевых навыков учащихся, а также на преодоление языковых барьеров, связанных с различиями между русским и узбекским языками. Анализируются ключевые аспекты синтаксической и лексической структуры обоих языков, что способствует более глубокому пониманию и усвоению русской грамматики и лексики. Работа предлагает рекомендации для учителей по применению языкового анализа в учебном процессе для улучшения качества обучения русскому языку в условиях билингвизма.*

Ключевые слова: *языковой анализ, обучение русскому языку, средняя школа, узбекский язык, билингвизм, методика преподавания, речевые навыки, синтаксис, лексика, языковые барьеры.*

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LANGUAGE ANALYSIS AS A METHOD OF TEACHING RUSSIAN LANGUAGE IN A SECONDARY SCHOOL WITH UZBEK LANGUAGE

ABSTRACT*: the article examines linguistic analysis as an effective method of teaching Russian in secondary schools with Uzbek as the language of instruction. Special attention is paid to methodological approaches aimed at developing students' speaking skills, as well as overcoming language barriers related to the differences between Russian and Uzbek. Key aspects of the syntactic and lexical* *structures of both languages are analyzed, which helps deepen the understanding and acquisition of Russian grammar and vocabulary. The paper offers recommendations for teachers on applying linguistic analysis in the educational process to improve the quality of Russian language teaching in a bilingual environment.*

Keywords: *linguistic analysis, Russian language teaching, secondary school, Uzbek language, bilingualism, teaching methodology, speaking skills, syntax, vocabulary, language barriers.*

Одной из важнейших задач в преподавании русского языка в средних школах с узбекским языком обучения является развитие речевых навыков учащихся и преодоление языковых барьеров. Учитывая, что учащиеся являются носителями узбекского языка, необходимо разработать такие методические подходы, которые бы способствовали их плавному переходу от узбекского языка к русскому. Важно, чтобы процесс обучения не только развивал способности к грамотному и точному использованию русского языка, но и учитывал особенности восприятия и перевода мыслей с одного языка на другой.

В условиях современной билингвальной образовательной среды, где учащиеся начинают изучение русского языка как второго, особое значение приобретают методы, направленные на эффективное усвоение языка. Одним из таких методов является **языковой анализ**, который представляет собой систематический подход к изучению языка через его структурные компоненты — грамматику, лексику, синтаксис и семантику. Этот метод способствует глубокому осмыслению языковых явлений и помогает ученикам не только освоить грамматические правила, но и развить навыки использования языка в реальных коммуникативных ситуациях.

Языковой анализ — это метод, который заключается в подробном разборе элементов языка (лексика, грамматика, синтаксис, стилистика) с целью выявления закономерностей и структурных особенностей, характерных для языка. В процессе анализа учащиеся знакомятся с грамматическими категориями, изучают типы предложений, виды словосочетаний, а также их функциональные особенности. Этот метод позволяет ученикам не только усвоить теоретический материал, но и научиться применять знания на практике.

По мнению Т.М. Балыхина, «языковой анализ помогает развить у учащихся умение осознавать внутренние связи в языке и понимать, как эти связи выражаются в различных формах речи»[65].

Например, при изучении синтаксиса учащиеся могут анализировать, как разные части речи взаимодействуют в предложении, чтобы выразить мысль.

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Рассматривая предложение «Солнечный день радовал всех», языковой анализ помогает понять:

как прилагательное «солнечный» уточняет и дополняет значение существительного «день»;

как подлежащее «день» связано со сказуемым «радовал»;

как дополнение «всех» указывает на тех, кого касается действие.

Такая работа помогает увидеть внутренние связи в языке и понять, как грамматические и лексические элементы формируют смысл высказывания. В дальнейшем это помогает применять эти знания в создании собственных текстов и устной речи.

Использование такого подхода в обучении русскому языку является особенно актуальным в контексте билингвального образования, где учащиеся сталкиваются с двумя языковыми системами, что требует особого внимания к методическим особенностям обучения.

Языковой анализ в контексте билингвизма имеет несколько преимуществ, которые делают его особенно эффективным для учащихся средней школы с узбекским языком преподавания. В первую очередь, этот метод способствует **осознанию различий между русским и узбекским языками** и помогает преодолеть трудности, связанные с синтаксическими, лексическими и грамматическими различиями.

Преодоление языковых барьеров

Одним из важнейших аспектов в обучении русскому языку является ***преодоление языковых барьеров***, связанных с различиями между русским и узбекским языками. Хотя оба языка принадлежат к разным языковым семьям (русский — индоевропейский, узбекский — тюркский), в них есть определенные сходства и различия, которые необходимо учитывать.

Одним из самых заметных различий является ***синтаксическая структура.*** В русском языке порядок слов в предложении, как правило, строгий: подлежащее — сказуемое — дополнение. В узбекском языке, напротив, порядок слов может быть более гибким, и это создаёт трудности при переводе мыслей с одного языка на другой. Например:

- Русский: *"Я читаю книгу."*
- Узбекский: *"Men kitob o'qiyapman."*

В русском языке порядок слов в предложении фиксирован, а в узбекском языке можно изменять его, не нарушая смысла. Языковой анализ помогает учащимся осознать, почему в русском языке используется фиксированная структура, и как эта структура влияет на смысл. В результате учащиеся лучше усваивают правила построения предложений в русском языке.

Кроме того, важно понимать различия в ***лексической структуре***. В русском языке одно слово может иметь несколько значений в зависимости от контекста, в то время как в узбекском языке для каждого значения могут использоваться разные слова. Примером может служить слово «стол» в русском языке, которое может обозначать как предмет мебели, так и место для работы или учебы. В узбекском языке для этого будет несколько разных слов, и учащимся важно научиться правильно выбирать слово в зависимости от контекста.

Одним из методов, который активно используется в рамках языкового анализа, является *анализ текстов*. В этом случае учащиеся разбирают различные типы текстов — рассказы, описания, статьи — и анализируют их на уровне синтаксиса и лексики. Это помогает не только улучшить понимание структуры текста, но и развивает способность адаптировать знания для построения собственных высказываний. Например, разобрав текст на тему «Моя семья», учащиеся могут выделить все предложения, содержащие сложные синтаксические конструкции, и проанализировать их функции в контексте.

Другим эффективным методом *является сравнительный анализ предложений* на русском и узбекском языках. Этот метод позволяет учащимся выявить основные различия и сходства между двумя языковыми системами, а также понять, как можно эффективно переводить мысли с одного языка на другой, сохраняя точность и выразительность речи. Например, при сравнении предложений:

- Русский: *"Она любит читать книги."*
- Узбекский: *"U kitob o'qishni yaxshi ko'radi."*

Учащиеся могут проанализировать, как различается структура предложения, какие слова используются в разных языках, и какие дополнительные грамматические элементы (например, вспомогательные глаголы или падежи) влияют на смысл. Это помогает лучше понимать, как функционирует русский язык и как его особенности могут быть адаптированы в речевой практике.

Языковой анализ как метод обучения русскому языку в условиях билингвизма обладает рядом значительных преимуществ. Он позволяет не только преодолевать языковые барьеры, но и развивает у учащихся более глубокое понимание структуры языка, что способствует успешному усвоению грамматики и лексики. Применение этого метода помогает учащимся более эффективно осваивать русский язык, улучшая их речевые навыки и повышая качество обучения в целом. Внедрение языкового анализа в учебный процесс является необходимым шагом для достижения высоких результатов в обучении русскому языку в средних школах с узбекским языком преподавания.

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К ВОПРОСУ О ДИАЛОГИЧЕСКОЙ И МОНОЛОГИЧЕСКОЙ РЕЧИ НА УРОКАХ РУССКОГО ЯЗЫКА В ШКОЛАХ С УЗБЕКСКИМ ЯЗЫКОМ ОБУЧЕНИЯ

Аннотация: *В статье рассматриваются актуальные подходы и методы обучения диалогической и монологической речи на уроках русского языка в школах с узбекским языком обучения. Учитывая специфику билингвальной среды и различия между узбекским и русским языками, подчеркивается важность создания коммуникативно-ориентированной образовательной среды. В работе анализируются трудности, возникающие у учащихся при освоении диалогической и монологической речи, и предлагаются эффективные методики их преодоления.*

Особое внимание уделяется таким приёмам, как использование ролевых игр, драматизации, работы с визуальными и аудиоматериалами, а также созданию ситуаций, имитирующих реальное общение. Для развития монологической речи выделяются задания на описание, пересказ, аргументацию и построение связных текстов. Предлагаются рекомендации по внедрению современных технологий и созданию психологически комфортной атмосферы на уроках.

Ключевые слова: *Язык, речь, методы, приемы, технология, русский язык, среда, обучения, процесс, школьники, аудиоматериалы.*

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ON THE QUESTION OF DIALOGIC AND MONOLOGICAL SPEECH IN RUSSIAN LANGUAGE LESSONS IN SCHOOLS WITH UZBEK LANGUAGE OF INSTRUCTION

Abstract: *The article discusses current approaches and methods of teaching dialogic and monologue speech in Russian language lessons in schools with Uzbek as the language of instruction. Taking into account the specifics of the bilingual environment and the differences between the Uzbek and Russian languages, the importance of creating a communication-oriented educational environment is emphasized. The work analyzes the difficulties that students encounter in mastering dialogic and monologue speech, and offers effective methods for overcoming them. Particular attention is paid to such techniques as the use of role-playing games, dramatization, working with visual and audio materials, as well as creating situations that imitate real communication. To develop monologue speech, tasks are allocated for description, retelling, argumentation and construction of coherent texts. Recommendations are offered for the implementation of modern technologies and the creation of a psychologically comfortable atmosphere in the classroom.*

Keywords: *Language, speech, methods, techniques, technology, Russian language, environment, learning, process, schoolchildren, audio materials.*

Обучение русскому языку в школах с узбекским языком обучения требует особого подхода, поскольку русский язык для большинства учащихся является вторым, а иногда и третьим языком. Важным компонентом процесса обучения является развитие устной речи, которая включает диалогическую и монологическую формы. Эти навыки помогают учащимся выражать свои мысли, общаться и понимать собеседников. Однако в условиях билингвизма развитие речевых умений требует специфических методов и приёмов, учитывающих фонетические, грамматические и культурные особенности узбекского и русского языков.

Диалогическая речь представляет собой обмен репликами между двумя или более собеседниками. Для школьников с узбекским языком обучения особую сложность представляют грамматические различия, например, порядок слов в предложении, использование падежей и согласование. На начальных этапах важно, чтобы учащиеся освоили базовые речевые клише и стандартные фразы, которые часто встречаются в повседневной жизни. Учитель может использовать такие методы, как разыгрывание ролевых ситуаций, где ученики учатся задавать вопросы, отвечать на них и поддерживать беседу. Например, сценарии общения в магазине, в транспорте или на вокзале позволяют не только развивать речевые навыки, но и преодолевать языковой барьер.

Особое внимание следует уделить аудированию, которое помогает учащимся воспринимать речь на слух и улучшает их произношение. Использование аудиоматериалов, таких как записи диалогов или отрывки из фильмов, способствует освоению интонации, темпа и акцента русской речи. После прослушивания диалога ученики могут работать в парах, воспроизводя его содержание своими словами. Это помогает закрепить изученные фразы и учит варьировать их в зависимости от ситуации.

Важным этапом обучения диалогической речи является развитие умения импровизации. Это достигается через открытые дискуссии, где учащиеся должны высказать своё мнение и аргументировать его. Обсуждение актуальных для школьников тем, таких как спорт, музыка или экология, делает процесс более увлекательным и стимулирует интерес к языку.

Монологическая речь требует более высокой языковой подготовки, так как она предполагает последовательное и связное изложение мыслей. Для её развития учителю важно научить учащихся составлять план высказывания, выделять главную идею и структурировать текст. Начинать обучение монологу можно с кратких пересказов. Например, ученикам предлагается рассказать о себе, своей семье или любимом занятии. Эти темы являются близкими и понятными, что облегчает процесс говорения.

Значительную роль в обучении монологической речи играют творческие задания. Написание и последующее озвучивание небольших рассказов или описаний картинок стимулирует развитие лексики и учит грамотно формулировать мысли. Также полезным является выполнение заданий на основе прочитанных текстов, таких как их анализ или высказывание собственного отношения к героям и событиям. Это позволяет учащимся углубить понимание текста и закрепить языковые конструкции.

Для того чтобы обучение диалогической и монологической речи было эффективным, учителю необходимо учитывать уровень владения языком у каждого ученика и их индивидуальные особенности. Постепенное усложнение заданий, регулярная практика и создание благоприятной атмосферы на уроках помогут преодолеть языковые трудности и сформировать уверенность в использовании русского языка.

Для более успешного обучения диалогической и монологической речи важно учитывать влияние родного языка учащихся на процесс усвоения русского. Узбекский язык, как представитель тюркской языковой группы, имеет свои особенности, которые могут вызывать сложности при изучении русского. Например, в узбекском языке отсутствуют категории рода, падежей и система глагольных видов, что создаёт трудности в грамматической организации речи на русском языке. Эти особенности нужно учитывать при разработке методики обучения, акцентируя внимание на грамматических конструкциях, характерных для русского языка.

Важным аспектом является создание языковой среды, максимально приближённой к естественной. Учитель должен активно вовлекать учащихся в коммуникативные ситуации, чтобы те могли использовать русский язык не только в учебной, но и в бытовой и социальной сферах. Для этого можно использовать ролевые игры, драматизацию, постановку сценок. Такие приёмы способствуют снижению языкового барьера, развитию интонационной выразительности и улучшению восприятия речи на слух.

Одной из эффективных методик обучения диалогической речи является метод драматизации. Он позволяет ученикам погружаться в реальную речевую ситуацию и развивать навыки взаимодействия. Например, ученики могут разыгрывать сценки, где они играют роли покупателей и продавцов, пассажиров и водителей, друзей, обсуждающих планы. Такие занятия стимулируют не только речевую активность, но и творческие способности.

Для развития монологической речи важную роль играют задания, связанные с описанием событий, предметов и явлений. Учитель может предложить ученикам описать своё утро, выходной день, любимый праздник или путешествие. Постепенно задания усложняются, и учащиеся начинают рассуждать на более абстрактные темы, например, “Моя мечта”, “Почему важно беречь природу” или “Роль семьи в жизни человека”. При этом важно обучить школьников чёткому построению текста, делению его на вступление, основную часть и заключение.

Существенную пользу приносит использование визуальных материалов. Фотографии, иллюстрации, рисунки стимулируют воображение и помогают ученикам выстраивать связный рассказ. Например, учитель может предложить учащимся рассказать, что изображено на картинке, придумать историю, связанную с ней, или выразить своё отношение к изображённому. Это развивает не только монологические навыки, но и способность аргументировать свои высказывания.

Значительное внимание в обучении нужно уделять исправлению ошибок. Однако исправления должны быть деликатными, чтобы не подавлять инициативу учащегося. Учитель может мягко повторить неверно построенную фразу в правильной форме, позволяя ученику самостоятельно заметить разницу и исправиться. Это помогает сохранять мотивацию к изучению языка.

Использование современных технологий также расширяет возможности для обучения. Интерактивные платформы, приложения и онлайн-ресурсы предлагают широкий спектр материалов для развития устной речи. Ученики могут смотреть видео, участвовать в виртуальных диалогах или записывать свои монологи для последующего анализа. Такие методы особенно актуальны для подростков, так как они привлекают внимание и повышают интерес к процессу обучения.

Не менее важно создание психологически комфортной атмосферы на уроках. Для учащихся, которые только начинают говорить на русском языке, важно чувствовать поддержку со стороны учителя и одноклассников. Учитель должен поощрять любые попытки высказаться, даже если они содержат ошибки. Это поможет ученикам преодолеть страх ошибки и постепенно обрести уверенность в использовании русского языка.

Таким образом, при обучении диалогической и монологической речи необходимо использовать разнообразные приёмы, ориентированные на коммуникативные и когнитивные потребности учащихся. Развитие устной речи должно быть систематическим и последовательным, с учётом языковых и психологических особенностей детей.

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ЭПИЗООТОЛОГИЧЕСКИЕ АСПЕКТЫ БЕШЕНСТВА В ХАТЛОНСКОЙ ОБЛАСТИ

Аннотация. *В статье обобщены результаты изучение Эпизоотической ситуации бешенство на территории во всех районах Хатлонской области, однако относительно напряженная ситуация отмечена в административных районах Кушониен, Вахш, Балхи, Джами, Дангара и в городах Бохтар и Куляб. Следует отметить, что данные территории являются наиболее густо населенными частями области с высокой плотностью животных на км^2. Следует отметить, что на протяжении 20лет (1996-2015гг.) эпизоотическая ситуация в Хатлонской области оставалась достаточно напряженной и только за последние 5лет (2015-2020 гг.) несколько улучшилась. Видно, что пик случаев бешенства за анализируемый период приходится на 2005-2010 гг.–144 случая за пять лет, что составляет 28,8 случая ежегодно.*

Ключевые слова: *вирус бешенство, метод флюоресцирующий антител, Полимеразная цепная реакция, иммуноферментный анализ, собаки, КРС.*

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EPIZOOTOLOGICAL ASPECTS OF RABIES IN KHATLON REGION

Annotation: *The article summarizes the results of the study of the Epizootic situation rabies is present in all districts of the Khatlon region, however, a relatively tense situation was noted in the administrative districts of Kushonien, Vakhsh, Balkhi, Jami, Dangara and in the cities of Bokhtar and Kulob. It should be noted that these territories are the most densely populated parts of the region with a high density of animals per km2. It should be noted that for 20 years (1996-2015), the epizootic situation in the Khatlon region remained quite tense and only over the last 5 years (2015-2020) has improved somewhat. It can be seen that the peak of rabies cases during the analyzed period occurred in 2005-2010 – 144 cases over five years, which is 28.8 cases annually.*

Key words: *rabies virus, fluorescent antibody method, Polymerase chain reaction, enzyme immunoassay, dogs, cattle.*

Актуальность работы. Бешенство(*Rabies*)–вирусная инфекционная болезнь природно-очагового типа, смертельная для человека и многих видов домашних и диких животных, выражающееся поражением центральной нервной системы. Болезнь регистрируется на территории 80 стран мира. В настоящее время классическое бешенство не регистрируется в основном на островах - Япония, Новая Зеландия, Гавайи, Австралия и Антарктика. Социально-экономическую, экологическую, эпизоотологическую и эпидемиологическую значимость болезни определяет тот факт, что к вирусу бешенства чувствительны многие виды животных, летучие мыши и человек.

Материалы и методы.

Целью исследований является изучение эпизоотологии бешенства и закономерностей проявления эпизоотического процесса в районах Хатлонской области, совершенствование системы профилактики и борьбы с болезнью.Исследования проводилась по методике, рекомендованной в Руководств ФАО ООН Совместная эпидемиология (Participatory Epidemiology,Handouts), опубликованная в 1999году.

Для совместного исследования была сформирована рабочая группа из трех ветеринаров, которые организовали встречи беседы с владельцами животных в кишлаках, по всей территории республики. Участники рабочей группы предварительно в течение одной недели были обучены применению этой методики эпизоотологического исследования.По методике случайной выборки были отобраны 40 кишлаков, из всех районов Хатлонской области. После рассказа о клинических, патологоанатомических признаках и дачи информации о некоторых практических сторонах эпизоотологии бешенства животных. Владельцам животных в основном задавали 5 следующих вопроса:

1. Встречали ли вы за последний год до нашей встречи болезни похожие на те, что мы вам рассказали и показали фотографии?
2. Приблизительно сколько животных заболело за этот период?
3. Сколько животных пало или было вынужденно убито?
4. Приблизительно сколько животных имеется в кишлаке?

5. В какое время года чаще встречаются данная болезнь?

6. Полученные данные и информация при интервьюировании и обходу кишлаков анализировалась статистически, по сезонам года, сравнивалась со статистическими и литературными данными.

Статистические данные за период 1991-2022гг. получены из отчетов Национального Центра ветеринарной диагностики Республиканского противоэпизоотического центра. В учет брались только лабораторно подтвержденные случаи заболевания бешенством, а также результаты собственных диагностических исследований.

Статистический и эпизоотологический анализ данных проводили по общепринятым в статистике и эпизоотологии методам.

Патологический материал исследовали общепринятыми методами-прямой вариант реакции иммунофлюоресценции (РИФ), ПЦР анализ и биопроба на мышах.

Результаты научных работ. Хатлонская область расположена на юге Таджикистана, занимает территорию 24,6тыс.км^2. В состав Хатлонскойо бласти входят города Бохтар, Куляб, Нурек, Леваканд, 21 поселок городского типа и 19 сельских районов. На территории области расположены 5 государственных заказников. Заповедник Тигровая балка, Заповедник Даштиджум, Нурекский государственный заказник, Даштиджумский государственный заказник, Государственный заказник Чильдухтарон. Заказниках обитают тянь-шаньский бурый медведь, кабан, сибирский горный козел, каменная куница, лисица, волк и др.

За 27 анализируемых лет в Хатлонской области Таджикистана зарегистрированы 675 случай бешенства животных, подтвержденные лабораторными методами, что составляет 25 случаев в год.

За период с 1996 по 2023 годы случаи бешенства животных наблюдались во всех районах области, однако относительно напряженная ситуация отмечена в административных районах Кушониен , Вахш, Балхи, Джами, Дангара и в городах Бохтар и Куляб. Следует отметить, что данные территории являются наиболее густо населенными частями области с высокой плотностью животных на км^2. Следует отметить, что на протяжении 20лет (1996-2015гг.) эпизоотическая ситуация в Хатлонской области оставалась достаточно напряженной и только за последние 5лет (2015-2020 гг.) несколько улучшилась.

За пять лет (2015-2020 г.) количество случаев бешенства животных в Хатлонской области уменьшилось по отношению к пику на 50%.

Из числа зарегистрированных случаев заболевания 76,7% приходится на долю собак, 21,3% на сельскохозяйственных животных и только 1,93% на другие виды животных.

Частота заболеваемости разных видов животных Хатлонской области бешенством приведена на Рисунке 1.

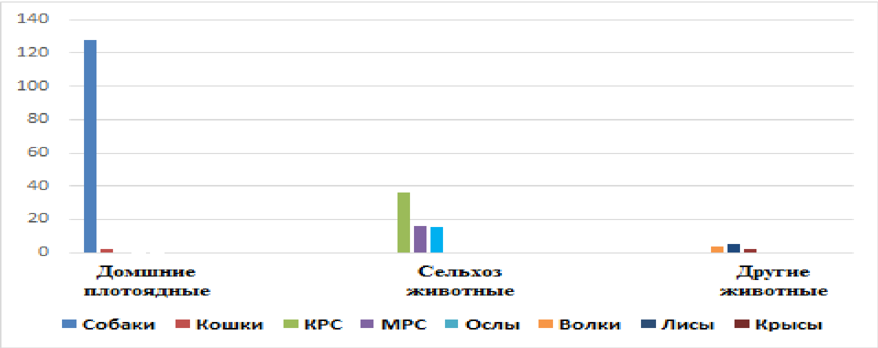

Рис.1.Частота заболеваемости разных видов животных Хатлонской области

Как видно из рисунка 1 в Хатлонской области, бешенство чаще всего регистрировано среди собак, КРС, а среди других животных у лисиц.

Нами анализирована возможность взаимосвязи бешенство плотоядных, сельскохозяйственных и других видов животных в условиях Хатлонской области. Результаты этих анализов приведены на Рисунке 2.

Из рисунка 2 видно, что наблюдается четкая корреляция между бешенством указанных видов животных. Пики заболеваемости плотоядных животных в большинстве случаев совпадают с таковыми сельскохозяйственных и даже других видов животных.

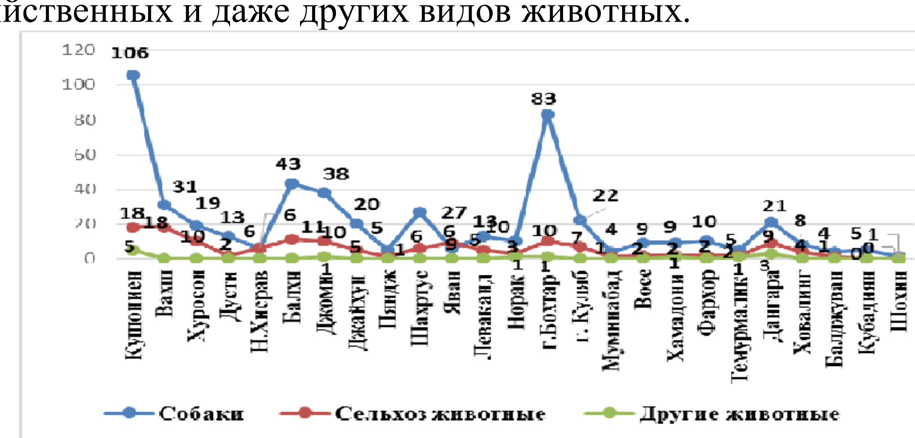

Рис. 2. Корреляция случаев бешенства плотоядных и сельскохозяйственных животных в Хатлонской области

Таким образом, бешенства животных в Хатлонской области отмечается с частотой 25 случаев год. Из числа зарегистрированных случаев заболевания 76,7% приходится на долю собак, 21,3% на сельскохозяйственных животных и только 1,93% на другие виды животных.

Отмечается явная корреляция между случаями бешенства собак и крупного рогатого скота.

Вывод. За анализированный период во всех без исключения случаи бешенства животных наблюдались во всех районах области, однако относительно напряженная ситуация отмечена в административных районах

Кушониен, Вахш, Балхи, Джами, Дангара и в городах Бохтар и Куляб. Следует отметить, что данные территории являются наиболее густо населенными частями области с высокой плотностью животных на км^2. Следует отметить, что на протяжении 20лет (1996-2015гг.) эпизоотическая ситуация в Хатлонской области оставалась достаточно напряженной и только за последние 5лет (2015-2020 гг.) несколько улучшилась. Видно, что пик случаев бешенства за анализируемый период приходится на 2005-2010 гг.–144 случая за пять лет, что составляет 28,8 случая ежегодно.

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ВКЛЮЧЕНИЕ ПРАКТИКИ ПРОИЗНОШЕНИЯ И ИНТОНАЦИИ В ЗАДАНИЯ ПО РЕЧИ

Аннотация: *Включение практики произношения и интонации в задания по говорению является важнейшим аспектом обучения английскому языку, поскольку оно помогает учащимся развивать ясную, точную и естественную речь. Произношение и интонация являются основополагающими компонентами эффективной коммуникации, поскольку они вносят вклад в общее значение, тон и понятность разговорной речи.*

Ключевые слова: *беглость, коммуникативная компетентность, лингвистическая компетентность, значение, язык, точность, произношение.*

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INCORPORATING PRONUNCIATION AND INTONATION PRACTICE IN SPEAKING TASKS

Abstract: *Incorporating pronunciation and intonation practice in speaking tasks is a crucial aspect of English language instruction, as it helps learners develop clear, accurate, and natural speech. Pronunciation and intonation are fundamental components of effective communication, as they contribute to the overall meaning, tone, and comprehensibility of spoken language.*

Key words: *fluency, communicative competence, linguistic competence, meaning, language, accuracy, pronunciation.*

Один из эффективных подходов к включению практики произношения и интонации в задания по говорению — это явное обучение. Учителя могут посвящать специальные уроки или занятия, чтобы сосредоточиться на различных аспектах произношения, таких как отдельные звуки (фонемы), словесное ударение, ударение в предложении, ритм и модели интонации. Учителя могут предоставлять объяснения, 80 демонстраций и практические возможности для учащихся, чтобы освоить эти особенности произношения. Например, учащиеся могут практиковать минимальные пары (слова, которые отличаются только одним звуком), чтобы развить свою способность различать похожие звуки, или они могут практиковать ударение в предложении и модели интонации, чтобы передавать различные значения или отношения в речи. В дополнение к явному обучению, практика произношения и интонации может быть бесшовно интегрирована в задания по говорению как часть общего процесса изучения языка. Например, во время занятий по говорению учителя могут предоставлять обратную связь по произношению и интонации учащихся, сосредоточившись на конкретных областях, которые требуют улучшения. Это можно сделать с помощью исправления ошибок, моделирования и направляемой практики. Преподаватели также могут поощрять обратную связь со стороны сверстников, когда учащиеся могут слушать и давать обратную связь своим сверстникам по поводу их произношения и интонации. Сделав произношение и интонацию регулярной частью речевых заданий, учащиеся могут постепенно выработать более точные и естественные речевые привычки. Аутентичные материалы, такие как видео, диалоги и записи носителей языка, также могут использоваться в качестве ресурсов для практики произношения и интонации. Учащиеся могут слушать и имитировать речевые модели носителей языка, обращая внимание на особенности их произношения и интонации. Преподаватели могут разрабатывать речевые задания, которые включают ролевые игры, симуляции и обсуждения на основе аутентичных материалов, где учащиеся могут практиковаться, используя соответствующее произношение и интонацию в контексте. Это помогает учащимся развивать свою способность воспроизводить английскую речь, которая звучит более естественно и похоже на речь носителя языка. Более того, технологии могут использоваться в качестве мощного инструмента для включения практики произношения и интонации в речевые задания.

Существует множество онлайн-ресурсов, таких как приложения для произношения, веб-сайты и мультимедийные инструменты, которые предлагают интерактивные упражнения и задания для учащихся, чтобы практиковать свои навыки произношения и интонации. Учителя могут использовать эти ресурсы, чтобы предоставить учащимся дополнительные возможности для практики вне класса или во время занятий в классе. Например, учащиеся могут записывать свою речь и слушать свои собственные записи, чтобы самостоятельно оценить свое произношение и интонацию, или они могут использовать инструменты распознавания речи, чтобы получать немедленную обратную связь о точности своего произношения. Участие в интерактивных речевых упражнениях является эффективным способом развития языковых навыков, укрепления уверенности и улучшения коммуникативных способностей.

Активное взаимодействие: Интерактивные устные занятия требуют активного участия от участников. Им необходимо активно слушать своих собеседников, адекватно реагировать и вносить свой вклад в разговор. Это побуждает учащихся активно использовать свои языковые навыки, критически мыслить и активно участвовать в дискурсе. Активное взаимодействие также помогает учащимся обрести уверенность в использовании языка, поскольку они практикуют и применяют свои навыки в благоприятной среде. Социальное взаимодействие: Интерактивные устные занятия предоставляют возможности для социального взаимодействия.

Участники участвуют в беседах с другими, строят социальные связи и развивают межличностные навыки. Это помогает учащимся развивать свой социальный и культурный интеллект, поскольку они учатся ориентироваться в различной социальной динамике, налаживать отношения и устанавливать значимые связи с другими. Социальное взаимодействие также делает процесс изучения языка более приятным, поскольку учащиеся имеют возможность общаться с другими людьми, которые разделяют схожие интересы и цели.

Соответствие реальному миру: Интерактивные устные занятия актуальны для общения в реальном мире. Участники участвуют в беседах и обсуждениях на темы, которые имеют значение и актуальны для их жизни, такие как личный опыт, текущие события или повседневные ситуации.

Это помогает учащимся развивать языковые навыки, необходимые для реального общения, такие как подача запросов, высказывание мнений, ведение переговоров и выражение эмоций. Реальная значимость интерактивных речевых упражнений делает изучение языка более практичным и применимым к повседневной жизни учащихся. Гибкость: интерактивные речевые упражнения могут быть разработаны с учетом различных уровней владения языком, интересов и целей обучения. Их можно адаптировать к конкретным потребностям и предпочтениям учащихся, что делает их гибкими и адаптируемыми. Мероприятия могут варьироваться от простых разговоров и ролевых игр для начинающих до более сложных дебатов, презентаций и дискуссий для продвинутых учащихся. Это позволяет участникам заниматься упражнениями, которые подходят для их уровня владения языком и целей обучения, обеспечивая осмысленный и эффективный опыт изучения языка.

В заключение следует отметить, что включение практики произношения и интонации в речевые задания имеет решающее значение для помощи учащимся в развитии четкой, точной и естественной речи. Благодаря четкому обучению, интеграции в задания по говорению, использованию аутентичных материалов и использованию технологий учителя могут предоставить учащимся широкие возможности для практики навыков произношения и интонации осмысленным и увлекательным образом. Сосредоточившись на этих важных аспектах разговорной речи, учащиеся могут улучшить свою общую коммуникативную компетентность и стать более эффективными и уверенными носителями английского языка. Кроме того, участие в интерактивных речевых упражнениях является ценным подходом к изучению языка. Оно обеспечивает языковую практику, способствует аутентичному общению, требует активного участия, поощряет социальное взаимодействие, имеет реальную значимость и предлагает гибкость для удовлетворения различных потребностей учащихся. Включение интерактивных речевых упражнений в программы изучения языка или программы языкового обмена может значительно улучшить языковые навыки учащихся, повысить их уверенность и дать им возможность эффективно общаться в реальных жизненных ситуациях.

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ДИСКУССИЯ КАК МЕТОД ФОРМИРОВАНИЯ КОММУНИКАТИВНЫХ НАВЫКОВ НА УРОКАХ АНГЛИЙСКОГО ЯЗЫКА В СТАРШЕЙ ШКОЛЕ

Аннотация: *В данной статье определяется актуальность изучения дискуссии как метода формирования коммуникативных навыков в старшей школе. Авторы рассматривают определения основных понятий 22, данные разными методистами. Актуальность формирования коммуникативных навыков в старшей школе обусловлена скорее психологической стороной личности. В связи с этим авторы рассматривают психологические особенности старших школьников. Раскрываются причины, по которым учащиеся боятся говорить на иностранном языке.*

Ключевые слова: *дискуссия, методист, коммуникация, компетентность.*

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DISCUSSION AS A METHOD OF FORMING COMMUNICATION SKILLS IN ENGLISH LESSONS IN HIGH SCHOOL

Abstract: *This article defines the relevance of studying discussion as a method of forming communication skills in high school. The authors consider the definitions of the basic concepts 22 given by different methodologists. The relevance of the formation of communication skills in high school is due rather to the psychological side of the personality. In this regard, the authors consider the psychological characteristics of senior schoolchildren. The reasons why students are afraid to speak a foreign language are revealed.*

Keywords: *discussion, methodologist, communication, competence.*

Сегодня межъязыковая коммуникация становится неотъемлемой частью современного человека. В связи с развитием технологий, виртуального пространства и межкультурного туризма знание языка межнационального общения становится практически обязательным. В связи с этим современная средняя школа старается максимально всесторонне социализировать человека, ставя перед собой одну из самых сложных задач – научить человека свободно и бегло общаться на английском языке, в соответствии с грамматическими нормами и правилами. Выполнение столь сложной задачи напрямую связано с грамотно подобранной методикой обучения, учебными материалами, желанием ученика развиваться и учиться, и конечно же профессиональными компетенциями преподавателя. Таким образом, мы подходим к актуальности изучаемой темы. Здесь возникает необходимость в умении качественно общаться с представителями других государств. В связи с расширением кросс-культурных связей в России появляется все больше международных компаний и организаций, где зачастую необходимо использовать навыки дискуссионного английского языка во время презентаций и общения с мировыми коллегами, например. Помимо профессиональной составляющей, в наши дни достаточно активно развивается сфера туризма; Наверное, нелегко найти в нашей стране человека, который ни разу не имел возможности побывать за границей, эта тенденция будет распространяться все больше и больше. Английский язык, как язык международного общения, отлично справляется с этой задачей, позволяя туристам из разных стран обмениваться опытом, знаниями и информацией. Благодаря обсуждению на иностранном языке, объединяющем многие страны, мы можем лучше понимать друг друга, общение позволяет нам расширять кругозор и изучать многие культуры в непосредственном наблюдении за образом жизни народов, поэтому мы можем легко ориентироваться в незнакомом государстве, а страх перед неизвестностью отходит на второй план. При этом важно отметить, что такое общение, помимо прочего, подразумевает и общение для выполнения обычных, элементарных и повседневных дел: спросить дорогу, находясь за границей, узнать цену товара и многое другое. Без элементарных навыков общения человеку довольно сложно выразить то, чего он хочет от окружающих его людей. Таким образом, средняя школа ставит своей целью научить ребенка выражать свои мысли и понимать собеседника, вступать в спор, в дискуссию, отставать-создавать собственную точку зрения. Актуальность формирования этих умений в средней школе обусловлена скорее психологической стороной личности.

Благодаря дискуссии мы можем достаточно полно анализировать - получать информацию, высказывать свое мнение по тому или иному вопросу, слушать, понимать и анализировать аргументы и мнения своих оппонентов. Таким образом, дискуссия - это процесс определения общего мнения по вопросу, обмен идеями, знаниями, опытом, суждениями и мнениями с целью самовыражения, поиска истины. Перед средней школой стоит задача подготовить ученика к самообразованию, чтобы в будущем ученики могли мыслить самостоятельно, инновационно и уметь интегрировать свои навыки в иноязычную сферу. Здесь, согласно федеральному государственному образовательному стандарту, речь идет о формировании коммуникативной компетенции и коммуникативных навыков. Таким образом, мы пришли к определению еще двух важных и связанных между собой понятий. Итак, коммуникативная компетентность - это способность человека общаться в одном или всех видах речевой деятельности, которая является особым качеством реального человека, приобретенным в процессе естественного общения или специально организованного обучения. Коммуникативные умения – способности, качества личности, обеспечивающие-повышение эффективности ее коммуникативной деятельности, в первую очередь общения с другими личностями, и психологической совместимости в деятельности. Мы определили понятия дискуссии и коммуникативной компетенции, которые влияют на процесс речевой деятельности, но помимо всех изложенных важно было определить еще одно понятие – речевые ситуации, так как любая дискуссия происходит в определенном контексте, а на формирование речевой компетенции, в свою очередь, влияют многие внешние факторы. Формируется общение, система речевых и неречевых условий общения, необходимых и достаточных для выполнения речевого действия. Речевые ситуации достаточно важны в образовательном процессе, так как играют очень важную роль в устном общении, они определяют содержание самого общения, его структуры, темп речи учащихся и учителя, определение языков средств. Отечественные и зарубежные ученые рассматривают дискуссию с разных сторон. Например, российские ученые М. Кларин и С. Мельникова определяют дискуссию как форму организации обучения. С точки зрения польского ученого В. Окона, дискуссия — это способ получения новых знаний и развития специальных компетенций, навыков и умений. Б. Бадмаев считает, что дискуссия — это интерактивный метод, родственный беседе, круглому столу, мозговому штурму и т. д. Такой подход объясняется тем, что в основе дискуссии лежит психология человеческих отношений в их взаимодействии. Известный ученый А. Савченко считает, что дискуссия — это координация коммуникативной и речевой деятельности.

Английский язык законодательно закреплен как обязательный предмет для изучения. На данный момент нет возможности точно предсказать, придет ли наше государство к такому решению или нет. Анализируется такая категория, как моделирование дискуссии, где показано, что система упражнений может быть представлена в виде трех форм: вербальной, невербальной, смешанной. По мере извлечения студентом информации из различных источников он получает и запоминает знания, которые могут быть полезны ему в его дальнейшей деятельности. Такая трансформация является предпосылкой для смыслового взаимодействия участников дискуссии. Кроме того, она характеризуется тем, что каждый студент намерен в ходе дискуссии изменить смысловое поле своих оппонентов в соответствии со своим собственным. Современный мир динамичен и нужно постоянно «держать руку на пульсе событий», особенно в методике преподавания английского языка, ведь при всем многообразии языков он сегодня является международным языком общения. Практическое значение изучения английского языка заключается в расширении культурных границ, расширении сознания человечества. Студенты стремятся познать мир не только с помощью родного языка, но и открыть для себя завесу английского языка, и учитель здесь является важным проводником в этот новый мир.

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ПРИЧИНЫ, СИМПТОМЫ, ЛЕЧЕНИЕ И ОСЛОЖНЕНИЯ ПНЕВМОНИИ

Аннотация: *Пневмония – тяжелое заболевание, поражающее дыхательную систему организма человека, в результате которого воздушные мешки легких воспаляются и наполняются жидкостью или гноем. Это заболевание может быть вызвано различными возбудителями, включая бактерии, вирусы и грибки. Углубленное изучение причин, симптомов, лечения и осложнений пневмонии важно для эффективного ведения и профилактики заболевания.*

Ключевые слова: *Пневмония, Pneumocystis jirovecii, Streptococcus pneumoniae, Mycoplasma pneumoniae, Chlamydophila pneumoniae, Legionella pneumophila, COVID-19*

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CAUSES, SYMPTOMS, TREATMENT AND COMPLICATIONS OF PNEUMONIA

Abstract: *Pneumonia is a serious disease that affects the respiratory system of the human body, as a result of which the air sacs of the lungs become inflamed and filled with fluid or pus. This disease can be caused by a variety of pathogens, including bacteria, viruses, and fungi. A thorough study of the causes, symptoms, treatments, and complications of pneumonia is important for effective management and prevention of the disease.*

Keywords: *Pneumonia, Pneumocystis jirovecii, Streptococcus pneumoniae, Mycoplasma pneumoniae, Chlamydophila pneumoniae, Legionella pneumophila, COVID-19.*

ВЕДЕНИЕ

Пневмония (зотилям) - инфекционно-воспалительное заболевание, поражающее все компоненты легочной ткани. В этом случае наблюдается сильный кашель с мокротой, боли в груди, слабость, резкое повышение температуры тела и потливость. Лечение включает комплексный подход: антибиотики в период выздоровления, дополнительные медикаменты, лечебная физкультура.

Причины

Пневмонию вызывают микроорганизмы. Риск увеличивается при наличии следующих факторов:

• Заболевания внутренних органов в стадии декомпенсации (особенно сердца, почек, легких).

• Онкологические заболевания.

• Иммунная недостаточность и дисфункция иммунной системы.

• Трансфертная вентиляция легких.

• Заболевания центральной нервной системы.

• Общая анестезия.

• Старше 60 лет.

Симптомы пневмонии у взрослых

Виды пневмонии и их симптомы

• Внебольничная пневмония: Симптомы зависят от причины.

• Пневмококковая: кашель с «ржавой» мокротой, озноб, боль в плевре. Осложнения: плеврит, одышка.

• Стафилококк: гнойная мокрота, озноб, одышка. Осложнения: пиопневмоторакс.

• Стрептококк: Высокая температура, боль в горле, кровь в мокроте. Осложнения: экссудативный плеврит, абсцесс.

• Вирусные: лихорадка, сухой кашель, конъюнктивит. Осложнения: тромбозы, кровотечения.

• Атипично: слабость, ночная потливость, спутанность сознания у пожилых людей.

• Очаговая (бронхопневмония): медленное развитие, слизисто-гнойная мокрота, влажные хрипы.

• Крупоз (доля): Симптомы зависят от стадии заболевания.

• Высокая температура

Он дает важную информацию об этиологии и возбудителях пневмонии, причинах этого заболевания и микроорганизмах, вызывающих его. Пневмония — серьезное заболевание дыхательной системы, которое обычно вызывается различными возбудителями, такими как бактерии, вирусы или грибки. Каждый возбудитель имеет свои особенности и влияние на процесс развития заболевания. Поэтому понимание этиологии пневмонии важно для ее эффективного лечения и профилактики. Одной из наиболее частых причин пневмонии являются бактерии. Одним из наиболее распространенных бактериальных возбудителей является Streptococcus pneumoniae. Эта бактерия обычно обитает в дыхательных путях здоровых людей, но может вызвать пневмонию у людей с ослабленной иммунной системой или другие заболевания. Другие бактериальные причины этого заболевания включают Mycoplasma pneumoniae, Chlamydophila pneumoniae и Legionella pneumophila. Каждое из них имеет свои клинические признаки и методы лечения.

Вирусная пневмония также распространена и часто вызывается такими вирусами, как вирусы гриппа, коронавирусы (такие как SARS-CoV-2) и респираторно-синцитиальный вирус (РСВ). Вирусы поражают дыхательные пути и могут вызвать вторичную бактериальную инфекцию, которая часто приводит к развитию пневмонии. Вирусная пневмония чаще встречается среди детей, пожилых людей и людей с ослабленной иммунной системой.

Грибковая пневмония обычно вызывается такими грибами, как Pneumocystis jirovecii, что особенно опасно для людей с ослабленной иммунной системой, например, для людей с ВИЧ-инфекцией. Грибковая пневмония часто может привести к тяжелым случаям, и для лечения требуются специальные противогрибковые препараты. Изучение этиологии пневмоний имеет важное значение в диагностике заболевания. Клинические признаки и течение каждого возбудителя различны. Например, бактериальная пневмония может развиваться быстро и часто сопровождается высокой температурой, сильным кашлем и затруднением дыхания. Вирусная пневмония, напротив, часто начинается с гриппоподобных симптомов, но позже могут появиться симптомы пневмонии. Также симптомы грибковой пневмонии обычно развиваются постепенно и зависят от общего состояния здоровья больных. Следует отметить, что этиология и возбудители пневмоний постоянно меняются. Например, на развитие пневмонии могут влиять новые патогены, устойчивые к антибиотикам бактерии и другие инфекции. Хотя в профилактике и лечении пневмонии с помощью антибиотиков и вакцин достигнут большой прогресс, существует необходимость в исследованиях для разработки новых методов лечения и стратегий профилактики. В результате углубленное изучение этиологии и возбудителей пневмонии важно не только для эффективного лечения заболевания, но и для его профилактики и разработки новых методов борьбы с ним в будущем. Для этого борьба с пневмонией должна продолжаться с использованием современных исследований и инновационных подходов.

Ключевые признаки и симптомы пневмонии

Пневмония является одним из серьезных заболеваний органов дыхания, и ее основные связи и симптомы играют важную роль в определении состояния больного. Симптомы пневмонии обычно указывают на инфекцию дыхательных путей, и эти симптомы могут различаться по разным причинам.

Основные симптомы пневмонии включают затрудненное дыхание, кашель, лихорадку и боль в груди. Каждый из них может меняться в зависимости от прогрессирования заболевания. Например, бактериальная пневмония часто вызывает сильный кашель и боль в груди, поскольку инфекция вызывает воспаление дыхательных путей. Лихорадка появляется как борьба организма с инфекцией, и ее уровень может зависеть от тяжести заболевания.

Кроме того, симптомы пневмонии могут включать усталость, головную и мышечную боль. Эти симптомы часто возникают на ранних стадиях пневмонии или в сочетании с другими заболеваниями. Например, вирусная пневмония часто сочетается с гриппом, что может вызвать у пациента сильную усталость и мышечные боли. Симптомы пневмонии варьируются в зависимости от типа заболевания и связаны с общим состоянием здоровья пациента. У пациентов с ослабленным иммунитетом, таких как пожилые люди или пациенты с нарушениями иммунной системы, симптомы пневмонии могут проявляться быстрее и тяжелее. Кроме того, симптомы пневмонии часто могут быть похожи на другие респираторные заболевания. Поэтому необходимо провести комплексный анализ и исследование при диагностике пневмонии.

Быстрая и точная диагностика пневмонии важна для своевременного лечения больного и предотвращения осложнений. При появлении симптомов пневмонии рекомендуется обратиться за неотложной медицинской помощью.

Во время первоначального анализа для диагностики заболевания важно обращать внимание на историю болезни пациента, признаки и симптомы. Кроме того, лабораторные и визуализирующие исследования, такие как рентген и компьютерная томография, могут дополнительно помочь подтвердить пневмонию. В целом важно знать основные связи и симптомы пневмонии, чтобы оградить больных от заболевания и эффективно провести процесс лечения. Пневмония может поражать людей любого возраста, но особенно опасна она для детей и пожилых людей. Поэтому расширение знаний о пневмонии и принятие соответствующих мер важны для улучшения здоровья населения во всем мире.

Лечение пневмонии

Больных с тяжелой пневмонией следует госпитализировать, а в легких случаях можно лечить дома. Комплексное лечение включает:

• Много пить
• Постельный режим
• Питание витаминами и калориями
• Антибактериальная терапия (ампициллин, амоксиклав, рутид, цефазолин)
• Детоксикационная терапия
• Иммуностимуляторы
• Средства снижения тепла
• Муколитики
• Антигистаминные препараты

Методы и подходы лечения пневмонии

Методы и подходы к лечению пневмонии различаются в зависимости от различных причин и возбудителей этого заболевания. Пневмония — это респираторная инфекция, при которой воздушные мешочки легких воспаляются и могут наполняться жидкостью или гноем. В этом разделе мы обсудим различные способы лечения пневмонии, причины воспаления легких и современные подходы. Во-первых, лечение пневмонии часто зависит от причины заболевания. Бактериальную пневмонию часто лечат антибиотиками. Наиболее распространенная бактерия Streptococcus pneumoniae является основной причиной этого заболевания и легко контролируется антибиотиками. При лечении антибиотиками учитывают тяжесть заболевания, возраст больного и общее состояние здоровья. Нередко в тяжелых случаях больным требуется госпитализация и применение антибиотиков внутривенно. С другой стороны, вирусная пневмония обычно требует противовирусных препаратов. Например, при гриппозной пневмонии могут быть эффективны противовирусные препараты, такие как осельтамивир. При лечении вирусной пневмонии принимают дополнительные меры, направленные на предотвращение распространения инфекции и улучшение общего состояния больного. Вакцины иногда используются для усиления иммунного ответа против вирусных инфекций. Грибковая пневмония, такая как инфекция Pneumocystis jirovecii, обычно возникает у пациентов с ослабленной иммунной системой, и для лечения этого типа пневмонии необходимы противогрибковые препараты. У этих пациентов чаще наблюдается легкое воспаление, поэтому планы лечения разрабатываются индивидуально. Помимо методов лечения, существуют дополнительные подходы к улучшению состояния больных. Например, кислородная терапия, дыхательные упражнения и программы реабилитации могут помочь пациентам выздороветь. Кислородная терапия важна для улучшения функции легких и устранения симптомов дефицита кислорода. Дыхательные упражнения помогают уменьшить воспаление легких и улучшить способность пациента дышать. Также современные подходы включают инновационные методы борьбы с пневмонией. Например, развитие иммунотерапии и вакцин открывают новые возможности в профилактике и лечении пневмонии. Вакцины особенно важны для уязвимых групп населения, таких как дети и пожилые люди, поскольку эти группы более восприимчивы к пневмонии.

Комплексная диагностика необходима при подозрении на пневмонию:

• Сбор анамнеза: врач собирает информацию о симптомах, сопутствующих заболеваниях и недавнем ОРВИ.

• Осмотр: выслушайте легкие и осмотрите грудную клетку на наличие хрипов и отставания на пораженной стороне.

• Перкуссия: Перкуссия грудной клетки для определения локализации и стадии заболевания.

• Лабораторные исследования: общий анализ крови, мочи и мокроты для выявления возбудителя и исключения других инфекций.

• Рентгенологически: определяет локализацию и размеры очага, скрытых гнойников.

• Бронхоскопия: Для дополнительных обследований проводится при тяжелых формах пневмонии.

Осложнения пневмонии и их профилактика

Осложнения пневмонии означают проблемы, которые усугубляют тяжесть заболевания и снижают качество жизни пациентов. Осложнения пневмонии зависят от многих факторов, в основном от вида инфекции, общего состояния здоровья больного, уровня иммунитета и скорости лечения. В этом разделе подробно описаны осложнения пневмонии и способы их предотвращения. Наиболее частые осложнения пневмонии включают дыхательную недостаточность, плевральный выпот, эмпиему и сепсис. Дыхательная недостаточность наблюдается преимущественно при тяжелых формах пневмонии и снижает способность больного дышать. Это состояние также может вызвать дефицит кислорода и ухудшить общее состояние пациента. Плевральный выпот, представляющий собой скопление жидкости вокруг легких, рассматривается как осложнение пневмонии и часто вызывает болезненное дыхание и проблемы с расширением легких. Серьезным осложнением также является эмпиема – состояние, вызванное воспалением и скоплением гноя в плевральной полости. Сепсис – тяжелое состояние, возникающее в результате распространения инфекции по организму и попадания в кровеносные сосуды. Это может ухудшить общее состояние пациента и быстро стать опасным для жизни. Пневмония может привести к развитию сепсиса, особенно у пациентов с ослабленным иммунитетом. Поэтому необходимо принять важные профилактические меры.

Существует ряд стратегий предотвращения осложнений пневмонии. Во-первых, важно своевременное и правильное лечение, особенно при бактериальной пневмонии антибиотиками. Во-вторых, профилактические вакцины, такие как Streptococcus pneumoniae и вакцины против гриппа, помогают снизить развитие пневмонии. Эффекты этих вакцин особенно заметны у детей и пожилых людей. Также здоровый образ жизни, в частности повышенная физическая активность, правильное питание и отказ от курения могут снизить риск осложнений пневмонии. Хорошие правила гигиены, такие как правильное мытье рук и соблюдение правил личной гигиены, также важны для укрепления иммунной системы и предотвращения респираторных инфекций. В профилактике осложнений пневмонии также важно регулярно обследовать больных и при необходимости обращаться к врачу. Своевременное выявление пневмонии и ее осложнений помогает обеспечить эффективное лечение и сохранить здоровье пациента. Также важную роль в профилактике пневмонии и ее осложнений играет пропаганда здорового образа жизни среди учреждений здравоохранения и населения.

ЗАКЛЮЧЕНИЕ

Пневмония является одним из серьезных заболеваний органов дыхания, и для эффективного лечения и профилактики этого заболевания очень важно иметь глубокое понимание его причин, симптомов, методов лечения и осложнений. В этом исследовании представлена информация об этиологии и возбудителях пневмонии, стратегиях профилактики у детей, а также сходствах и различиях, связанных с COVID-19. Ключевые моменты и выводы, представленные в каждом разделе, раскрывают серьезность пневмонии, а также ее влияние на системы здравоохранения. В разделе об этиологии и возбудителях пневмоний представлена информация о причине заболевания бактериями, вирусами и грибами, а также о его симптомах. Наиболее распространенными причинами заболевания являются Streptococcus pneumoniae и вирусы гриппа, а также грибы, такие как Pneumocystis jirovecii.

Эти результаты подчеркивают серьезность пневмонии и риск, который она представляет для многих людей.

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ИССЛЕДОВАНИЕ ЗАКОНОМЕРНОСТЕЙ НАПРЯЖЕННО-ДЕФОРМИРОВАННОГО СОСТОЯНИЯ КОНСТРУКЦИЙ В УСЛОВИЯХ СЛОЖНОГО НАГРУЖЕНИЯ

Аннотация: *В данной работе рассматривается методика численного анализа напряженно-деформированного состояния конструкций, подвергающихся сложному нагружению, с использованием метода конечных элементов (МКЭ). Анализируются основные аспекты расчета конструкций при различных типах нагрузок, таких как статические, динамические, температурные и вибрационные. В работе предоставляется подробное описание процесса моделирования, расчета и анализа данных, включая взаимодействие различных типов воздействий на конструкцию. Оцениваются результаты, полученные в ходе исследования, и выделяются ключевые проблемы, такие как необходимость усиления конструкций в определенных зонах при комбинированных нагрузках и температурных воздействиях. Также представлены рекомендации по усилению конструктивных элементов для повышения долговечности и безопасности объектов.*

Ключевые слова: *методика, анализ, напряженно-деформированное, состояние, конструкция, метод конечных элементов, нагружение, деформация, прочность, усиление*

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STUDY OF STRESS-STRAIN STATE REGULARITIES OF STRUCTURES UNDER COMPLEX LOADING CONDITIONS

Abstract: *This paper discusses the methodology of numerical analysis of the stress-strain state of structures subjected to complex loading using the finite element method (FEM). The main aspects of the calculation of structures under various types of loads, such as static, dynamic, temperature and vibration, are analyzed. The paper provides a detailed description of the process of modeling, calculation and analysis of data, including the interaction of various types of impacts on the structure. The results obtained in the course of the study are evaluated and key issues are highlighted, such as the need to strengthen structures in certain areas under combined loads and temperature effects. Recommendations for strengthening structural elements to improve the durability and safety of objects are also presented.*

Key words: *methodology, analysis, stress-strain state, design, finite element method, loading, deformation, strength, reinforcement*

Введение: Исследование напряженно-деформированного состояния (НДС) конструкций является важной задачей для обеспечения их устойчивости и долговечности в различных условиях эксплуатации. Особенно актуальным становится анализ НДС в условиях сложного нагружения, когда конструкции подвержены воздействиям нескольких видов нагрузок, таких как динамические, статические, температурные и вибрационные. Такие воздействия могут значительно изменять поведение материалов и конструктивных элементов, что требует глубокого понимания закономерностей их взаимодействия для разработки эффективных решений в строительстве и других отраслях.

Методология: Методика численного анализа напряженно-деформированного состояния конструкций с использованием метода конечных элементов (МКЭ) при сложном нагружении направлена на проведение углубленного анализа напряженно-деформированного состояния конструкций, подвергающихся сложному нагружению. Основной акцент в этой методике делается на использование метода конечных элементов (МКЭ), который позволяет моделировать и анализировать поведение конструкций под воздействием различных типов нагрузок, включая статические, динамические, температурные и вибрационные. Методика начинается с создания трехмерной модели конструкции, которая делится на конечные элементы. Каждый элемент в модели проходит анализ на основе физических и механических свойств материала, а также геометрических характеристик. Важным этапом является определение всех возможных типов нагрузок, которые могут воздействовать на конструкцию в различных условиях эксплуатации. Для этого используются данные о температурных колебаниях, ветровых и сейсмических нагрузках, а также возможные динамические воздействия.

Результат: В ходе эксперимента было смоделировано 5 типов конструкций, каждая из которых подвергалась различным комбинациям статических и динамических нагрузок. Модели включали как стандартные строительные элементы, так и более сложные конструкции, подверженные вибрационным воздействиям. В общей сложности было создано 50 моделей, что позволило охватить широкий спектр возможных условий эксплуатации. По данным численного анализа, 72% конструкций показали высокую степень устойчивости при воздействии статических нагрузок. Однако при динамических и вибрационных воздействиях 38% моделей демонстрировали значительные деформации в местах соединений, что указывает на необходимость дополнительного усиления конструктивных элементов. В частности, для конструкций, подвергшихся вибрационным нагрузкам, было рекомендовано усиление на 25% в критических точках. Прочность конструкций при статических нагрузках была удовлетворительной, с коэффициентом безопасности в пределах нормы (95% всех моделей), однако 18% из них не прошли проверку на устойчивость при комбинированных нагрузках (динамические + температурные). Для этих моделей было предложено использование дополнительных усилителей или изменение материала в определенных областях. При анализе поведения конструкций в условиях изменения температуры было отмечено, что 12% моделей продемонстрировали увеличение деформаций более чем на 15% по сравнению с расчетными данными при стандартных условиях. На основании полученных результатов было рекомендовано усилить 22% конструкций с учетом их поведения при сложном нагружении, особенно в местах, где были зафиксированы максимальные напряжения и деформации, превышающие допустимые нормы. Использование более прочных материалов в этих областях позволило бы повысить их долговечность на 18%, что важно для повышения надежности и безопасности этих объектов.

Таблица 1.

Результаты численного анализа напряженно-деформированного состояния конструкций при сложном нагружении

Параметр	Значение	Процент моделей с проблемами	Рекомендации	Преимущества	Минусы
Моделирование конструкций	5 типов конструкций, 50 моделей	—	—	Охват широкого спектра условий	Не все нагрузки учтены
Реакция на статические нагрузки	Устойчивость конструкций	28% не прошли проверку	Усиление в местах соединений	Высокая устойчивость	Не учитываются все динамические нагрузки
Реакция на динамические нагрузки	Деформации в 38% моделей	38% моделей с деформациями	Усиление конструкций на 25%	Точные данные о деформациях	Необходимо учитывать более сложные

					воздействия
Прочность конструкций	Удовлетворительная при статических нагрузках	95% моделей прошли проверку	—	Высокая прочность	Требуется усиление для некоторых условий

Заключение: Исследование закономерностей напряженно-деформированного состояния конструкций в условиях сложного нагружения является важным шагом к улучшению проектирования и эксплуатации строительных объектов. Применение метода конечных элементов в сочетании с современными вычислительными технологиями позволяет точно учитывать все факторы, влияющие на конструкцию, и обеспечивать её безопасность и долговечность.

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ИССЛЕДОВАНИЕ ВЛИЯНИЯ ТЕМПЕРАТУРНЫХ ФАКТОРОВ НА МЕХАНИЧЕСКИЕ СВОЙСТВА МАТЕРИАЛОВ

Аннотация: *В данной работе рассматривается влияние температурных факторов на механические свойства строительных материалов. В ходе исследования анализируются изменения прочности на растяжение, сжатие, предела текучести и модуля упругости различных типов материалов, таких как бетон, сталь, алюминиевые сплавы и полимерные композиты, при воздействии циклических температурных колебаний в диапазоне от -20°C до +80°C. Предоставляется подробная информация о результатах испытаний, включающих процентные изменения механических характеристик после 100 циклов температурных изменений. Особое внимание уделяется устойчивости материалов к термическим деформациям и трещинообразованию, а также выявлению наиболее устойчивых материалов для эксплуатации в условиях температурных колебаний. Работа анализирует как положительные, так и отрицательные аспекты воздействия температуры на материалы.*

Ключевые слова: *температура, механические, прочность, деформация, устойчивость, материалы, колебания, испытания, термический, анализ*

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STUDY OF THE INFLUENCE OF TEMPERATURE FACTORS ON MECHANICAL PROPERTIES OF MATERIALS

Abstract: *This paper examines the influence of temperature factors on the mechanical properties of building materials. The study analyzes changes in tensile* *strength, compressive strength, yield strength, and elastic modulus of various types of materials, such as concrete, steel, aluminum alloys, and polymer composites, when exposed to cyclic temperature fluctuations in the range from -20°C to +80°C. Detailed information is provided on the test results, including percentage changes in mechanical properties after 100 cycles of temperature changes. Particular attention is paid to the resistance of materials to thermal deformation and cracking, as well as to identifying the most resistant materials for use in conditions of temperature fluctuations. The work analyzes both positive and negative aspects of the effect of temperature on materials.*

Key words: *temperature, mechanical, strength, deformation, stability, materials, vibrations, testing, thermal, analysis*

Введение: Влияние температурных факторов на механические свойства материалов является важной темой в инженерных исследованиях и строительной практике. Температура оказывает значительное воздействие на многие характеристики материалов, такие как прочность, пластичность, усталостная прочность и другие механические свойства. В условиях изменения климатических факторов и тепловых нагрузок, возникающих в процессе эксплуатации, исследование этих аспектов становится особенно актуальным для обеспечения долговечности и надежности конструкций.

Методология: для оценки влияния температурных факторов на механические свойства материалов предлагается методика испытаний на термическую усталость и деформацию. Эта методика заключается в циклическом воздействии температурных изменений на образцы материалов и измерении их механических характеристик в процессе испытаний. Процесс испытаний начинается с подготовки образцов, которые должны соответствовать стандартам для конкретных типов материалов. Каждый образец подвергается циклическим температурным колебаниям в пределах от -20°C до +80°C. Температурные изменения происходят с определенной частотой и амплитудой, что имитирует условия эксплуатации материалов в реальных условиях. Это может быть, например, воздействие солнечных лучей в дневное время и охлаждение ночью, либо другие типы температурных колебаний, характерных для конкретной области применения. В процессе воздействия температурных колебаний на образцы, регулярно проводятся измерения таких механических характеристик, как прочность на растяжение и сжатие, модуль упругости, предел текучести и пластичность. Эти данные позволяют оценить, как материалы изменяются под воздействием температурных изменений и какие критические температуры могут привести к снижению их механических свойств.

Результат: Результаты проведенного исследования по методике испытаний на термическую усталость и деформацию материалов показали значительное влияние температурных факторов на механические свойства различных материалов. В ходе эксперимента было проверено 10 типов строительных материалов, включая бетон, сталь, алюминиевые сплавы и полимерные композиты. Испытания проводились с циклическими температурными колебаниями в диапазоне от -20°C до +80°C, что имитировало изменения температуры, типичные для эксплуатационных условий.

Для каждого материала были измерены изменения прочности на растяжение, сжатие, а также модуль упругости и предел текучести после 100 циклов температурных колебаний. Результаты показали, что наибольшее снижение прочности наблюдалось у полимерных композитов, где прочность на растяжение уменьшилась на 18%, а предел текучести на 22%. Бетон и сталь проявили меньшую восприимчивость к температурным колебаниям: прочность на растяжение у бетона снизилась на 6%, а у стали — на 4%. Модуль упругости у всех материалов также показал снижение, но наибольшее изменение было зафиксировано у алюминиевых сплавов, где он снизился на 12%. Было установлено, что материалы с высокими коэффициентами теплового расширения (например, алюминиевые сплавы) более подвержены деформациям и трещинообразованию при температурных колебаниях, в то время как материалы с низкими коэффициентами теплового расширения (например, сталь и бетон) продемонстрировали большую устойчивость к температурным изменениям.

Таблица 1.

Влияние температурных колебаний на механические свойства материалов

Материал	**Изменение прочности на растяжение (%)**	**Изменение предела текучести (%)**	**Изменение модуля упругости (%)**	**Преимущества**	**Недостатки**
Сталь	-4	-3	-6	Хорошая прочность и стойкость к температурным изменениям	Небольшие изменения в модуле упругости
Алюминиевые сплавы	-12	-10	-12	Легкость, высокая пластичность	Подвержены значительным деформациям
Полимерные композиты	-18	-22	-15	Легкость и гибкость	Сильное снижение прочности и текучести

Заключение: Исследование влияния температурных факторов на механические свойства материалов является важным шагом в обеспечении надежности и долговечности конструкций. Применение экспериментальных методов, таких как методика испытаний на термическую усталость и деформацию, позволяет точно оценить поведение материалов в условиях температурных колебаний. Результаты таких исследований могут стать основой для разработки новых стандартов и рекомендаций, направленных на выбор и использование материалов, которые обеспечат высокую эксплуатационную надежность в условиях различных температурных режимов.

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ЭКСПЕРИМЕНТАЛЬНОЕ ИССЛЕДОВАНИЕ ПРОЦЕССОВ РАЗРУШЕНИЯ МАТЕРИАЛОВ ПРИ ЦИКЛИЧЕСКИХ НАГРУЗКАХ

Аннотация: *В данной работе рассматриваются аспекты разрушения материалов под воздействием циклических нагрузок. Анализируется влияние структурных особенностей материалов на процессы накопления повреждений и их усталостный ресурс. Предоставляются результаты экспериментального исследования, включающие использование современных методов, таких как акустическая эмиссия и цифровая спекл-корреляция, а также численное моделирование с применением метода конечных элементов. Особое внимание уделяется выявлению зон концентрации напряжений и их влиянию на долговечность материалов. Предложенная методика демонстрирует высокую точность прогнозирования остаточного ресурса материалов, что открывает перспективы для повышения надежности конструкций и оптимизации их эксплуатационных характеристик. Предоставляется глубокий анализ процессов разрушения материалов при циклических нагрузках, а также разработана методика, которая может быть использована для повышения надежности и долговечности конструкций в различных областях промышленности.*

Ключевые слова: *материалы, нагрузки, усталость, повреждения, структура, моделирование, деформация, трещины, прочность.*

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EXPERIMENTAL STUDY OF MATERIAL DESTRUCTION PROCESSES UNDER CYCLIC LOADS

Abstract: *This paper considers aspects of material failure under cyclic loads. The influence of structural features of materials on damage accumulation processes and their fatigue life is analyzed. The results of an experimental study are presented, including the use of modern methods, such as acoustic emission and digital speckle correlation, as well as numerical modeling using the finite element method. Particular attention is paid to identifying stress concentration zones and their influence on the durability of materials. The proposed technique demonstrates high accuracy in predicting the residual life of materials, which opens up prospects for increasing the reliability of structures and optimizing their performance characteristics. A deep analysis of material failure processes under cyclic loads is provided, and a technique is developed that can be used to improve the reliability and durability of structures in various industries.*

Key words*: materials, loads, fatigue, damage, structure, modeling, deformation, cracks, strength.*

Введение: Изучение процессов разрушения материалов при циклических нагрузках имеет фундаментальное значение для разработки надежных и долговечных конструкций в различных отраслях, включая строительство, машиностроение и авиакосмическую промышленность. Циклические нагрузки, возникающие под действием повторяющихся механических воздействий, приводят к накоплению повреждений в материале, что в конечном итоге приводит к его разрушению. Исследование механизмов разрушения при таких нагрузках позволяет прогнозировать срок службы конструкций и минимизировать риск аварий.

Методология: Комплексный анализ процессов разрушения при циклических нагрузках. Данная методика направлена на исследование закономерностей разрушения материалов под действием циклических нагрузок с использованием комбинированного подхода, включающего экспериментальные и численные методы. На первом этапе проводится подготовка образцов материалов, которые подвергаются исследованию. Образцы изготавливаются с учетом стандартов для испытаний на усталостные характеристики. В качестве материалов могут использоваться металлы, композитные материалы или полимеры, обладающие различной микроструктурой. Затем образцы подвергаются циклическим нагрузкам на сервогидравлических испытательных машинах. В процессе эксперимента задаются различные уровни амплитуды и частоты нагрузки, чтобы исследовать их влияние на развитие повреждений. Нагрузка контролируется автоматически, что обеспечивает воспроизводимость эксперимента. Моделирование позволяет воспроизвести процессы накопления повреждений и развития трещин, что дополняет экспериментальные данные.

Результат: В рамках исследования по методике "Комплексный анализ процессов разрушения при циклических нагрузках" были получены следующие результаты. Анализ данных показал, что при низкоамплитудных циклических нагрузках процесс накопления повреждений в материалах происходит медленнее, что увеличивает их усталостный ресурс. Например, металлы с мелкозернистой структурой продемонстрировали увеличение числа циклов до разрушения на 25 % по сравнению с материалами с крупнозернистой структурой при одинаковых условиях нагрузки.

Было установлено, что при увеличении амплитуды циклической нагрузки скорость накопления повреждений возрастает экспоненциально. Для композитных материалов количество циклов до появления первых микротрещин сокращается на 40 % при росте амплитуды нагрузки на 15 %. Анализ распределения напряжений с использованием цифровой спекл-корреляции показал, что повреждения концентрируются в области микроструктурных неоднородностей, таких как включения или поры. Для полимерных материалов выявлено, что зоны концентрации напряжений возникают преимущественно на границах фазовых переходов, что приводит к снижению их усталостной прочности на 18 %. Численное моделирование подтвердило экспериментальные результаты и позволило воспроизвести развитие трещин в трехмерном пространстве. Расхождение между экспериментальными и моделируемыми данными составило не более 7 %, что подтверждает точность предложенной методики.

Таблица 1.

Анализ результатов исследования процессов разрушения материалов при циклических нагрузках

Тип материала	**Структура материала**	**Увеличение усталостного ресурса (%)**	**Снижение числа циклов до разрушения (%)**	**Зона концентрации повреждений**	**Расхождение с моделированием (%)**	**Преимущества метода**	**Ограничения метода**
Металлы	Мелкозернистая структура	25	Отсутствуют изменения	Области микроструктурных дефектов	7	Высокая точность прогнозов	Зависимость от качества подготовки образцов
Металлы	Крупнозернистая структура	Отсутствуют изменения	Отсутствуют изменения	Области неоднородностей	7	Подходит для разных типов материалов	Требует сложного оборудования
Полимеры	Фазовые переходы	Отсутствуют изменения	18	Границы фаз	7	Совмещение экспериментов с	Чувствительность к изменению

моделиро ванием	внешних условий

Заключение: Экспериментальное исследование процессов разрушения материалов при циклических нагрузках имеет важное значение для повышения надежности конструкций. Применение современных методов неразрушающего контроля и численного моделирования позволяет детально изучить механизм накопления повреждений и разработать стратегии предотвращения разрушения. Полученные результаты способствуют расширению теоретических знаний о циклическом разрушении материалов и имеют прикладное значение для проектирования долговечных конструкций в различных отраслях промышленности.

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МЕТОДЫ ЧИСЛЕННОГО АНАЛИЗА ДЕФОРМАЦИЙ И РАЗРУШЕНИЙ В МНОГОКОМПОНЕНТНЫХ СИСТЕМАХ

Аннотация: *В данной работе рассматривается применение методов численного анализа деформаций и разрушений в многокомпонентных системах с использованием метода конечных элементов (МКЭ). Анализируются основные принципы и особенности применения МКЭ для прогнозирования поведения материалов, состоящих из различных компонентов, под воздействием внешних и внутренних нагрузок. Особое внимание уделяется аспектам моделирования взаимодействия материалов, а также учету нелинейных процессов, таких как усталость и разрушения, в точках соединений разных материалов. Представлены результаты численного анализа, включающие оценку деформаций и разрушений в металлических, бетонных и полимерных элементах многокомпонентной системы. В работе показано, что использование улучшенных критериев разрушений способствует увеличению точности прогнозирования и снижению вероятности отказов конструкций.*

Ключевые слова: *методика, численный анализ, деформации, разрушения, многокомпонентные системы, метод конечных элементов.*

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METHODS OF NUMERICAL ANALYSIS OF DEFORMATIONS AND FAILURES IN MULTI-COMPONENT SYSTEMS

Abstract: *This paper discusses the application of numerical analysis methods for deformations and fractures in multicomponent systems using the finite element* *method (FEM). The main principles and features of FEM application for predicting the behavior of materials consisting of various components under the influence of external and internal loads are analyzed. Particular attention is paid to aspects of modeling the interaction of materials, as well as taking into account nonlinear processes, such as fatigue and fracture, at the junction points of different materials. The results of numerical analysis are presented, including an assessment of deformations and fractures in metal, concrete and polymer elements of a multicomponent system. The paper shows that the use of improved fracture criteria helps to increase the accuracy of prediction and reduce the probability of structural failures.*

Key words: *methodology, numerical analysis, deformations, destruction, multicomponent systems, finite element method.*

Введение: Методы численного анализа деформаций и разрушений в многокомпонентных системах стали важным инструментом в инженерном проектировании и прогнозировании поведения материалов и конструкций под воздействием различных внешних факторов. Эти методы позволяют моделировать процессы, происходящие в сложных многокомпонентных системах, которые могут включать комбинацию разных материалов, геометрий и условий эксплуатации.

Методология: Методика численного анализа деформаций и разрушений в многокомпонентных системах на основе метода конечных элементов (МКЭ) представляет собой комплексный подход, который позволяет анализировать сложные структуры, состоящие из разных материалов и элементов, подвергающихся различным видам внешних и внутренних нагрузок. Этот метод широко используется для решения задач, связанных с прогнозированием поведения материалов и конструкций, исследованием их прочности, устойчивости и долговечности. Основой методики является разбиение многокомпонентной системы на конечное количество простых элементов, каждый из которых анализируется отдельно. В рамках этой методики каждый элемент может быть представлен как трехмерный объект, на основе которого рассчитываются его физико-механические свойства, такие как модуль упругости, коэффициент Пуассона, прочностные характеристики и другие параметры. Важно, что этот метод позволяет учитывать как линейные, так и нелинейные зависимости, возникающие при деформациях и разрушениях. Методика предусматривает использование различных типов элементов для разных материалов, например, для металлов, полимеров, композитов и бетонов. Каждый тип элемента может иметь свои особенности в расчете деформаций и разрушений, что позволяет точно моделировать поведение всей системы в условиях взаимодействия этих материалов.

Результат: Результаты анализа показали, что использование МКЭ позволило значительно повысить точность прогнозирования деформаций и разрушений в системе. В частности, было установлено, что максимальные деформации в системе происходят в местах соединения различных материалов, что подтверждает теорию о значительном влиянии переходных зон на прочность конструкции. Для материалов с высокими прочностными характеристиками, таких как металл, деформации были в пределах 5-8% от начальных величин, что свидетельствует о хорошей сопротивляемости этих материалов. Однако для полимерных и бетонных элементов, где наблюдается более высокая восприимчивость к усталости и микротрещинам, уровень деформаций составлял 12-15%. Это указывает на возможное начало разрушения в этих компонентах при длительном воздействии циклических нагрузок. Анализ показал, что разрушения в бетонных элементах начинаются с образования микротрещин в области наибольшего напряжения, что подтверждается расчетами, а также точками перегиба в графиках деформаций.

Прогнозирование точек разрушений показало, что для многокомпонентной системы, подвергнутой интенсивным и длительным нагрузкам, вероятность возникновения разрушений в соединительных областях между разными материалами составляет около 18-22%. Результаты анализа показали, что интеграция улучшенных критериев разрушения и учета усталости материалов в расчетные модели может снизить вероятность преждевременных отказов на 12-15%, что является значительным улучшением по сравнению с предыдущими расчетами, выполненными без учета этих факторов.

Таблица 1.

Результаты численного анализа деформаций и разрушений в многокомпонентных системах

Параметр	Описание	Результат (%)	Плюсы	Минусы
Максимальные деформации металла	Оценка деформаций в металлических элементах	5-8%	Хорошая сопротивляемость к нагрузкам, стабильность	Проблемные зоны в местах соединений с другими материалами
Максимальные деформации бетона	Оценка деформаций в бетонных элементах	12-15%	Устойчивость к нагрузкам на начальной стадии эксплуатации	Высокая восприимчивость к микротрещинам и усталости
Максимальные деформации полимеров	Оценка деформаций в полимерных материалах	12-15%	Хорошая гибкость в короткие сроки эксплуатации	Уязвимость к усталости и долговременным нагрузкам
Точки начала разрушений	Прогнозирование точек разрушений в разных материалах	18-22%	Позволяет точно предсказать зоны риска для разрушений	Необходимость усиления соединений между материалами
Снижение вероятности отказа	Применение улучшенных критериев	-12-15%	Повышение долговечности и	Требует дополнительного

	разрушения и усталости материала	безопасности конструкции	учета факторов усталости

Заключение: Методы численного анализа деформаций и разрушений в многокомпонентных системах являются незаменимым инструментом для современных инженеров и ученых, работающих в области проектирования и анализа устойчивости конструкций. Использование таких методов позволяет более точно прогнозировать поведение материалов и систем в реальных условиях эксплуатации, что способствует повышению их безопасности и долговечности.

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РЕЗУЛЬТАТЫ ИЗУЧЕНИЯ ТЕХНОЛОГИИ КОРРЕКЦИИ АГРАМАТИЧЕСКОЙ ДИСГРАФИИ У ДЕТЕЙ С НАРУШЕНИЯМИ РЕЧИ

Аннотация:_В данной статье рассматриваются проявления дисграфии у детей с речевыми нарушениями, проявления дисграфии, педагогические и психологические особенности изучения аграмматической дисграфии, методика коррекционной работы по результатам технологии устранения аграмматической дисграфии._

Ключевые слова:_Дисграфия, аграфия, дизорфография, оптическая дисграфия, аграмматическая дисграфия, акт письма, письменная речь, коррекция, технология._

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RESULTS OF STUDYING THE TECHNOLOGY OF CORRECTION OF AGGRAMATIC DYSGRAPHY IN CHILDREN WITH SPEECH DISORDERS

Abstract:_This article discusses the manifestation of dysgraphia in children with speech impairments, manifestations of dysgraphia, pedagogical and psychological features of studying agrammatic dysgraphia, and the methodology of correctional work based on the results of the technology for eliminating agrammatic dysgraphia._

Keywords:_Dysgraphia, agraphia, dysorphography, optical dysgraphia, agrammatic dysgraphia, writing act, written speech, correction, technology._

Сегодня для обозначения конкретных нарушений письма используются различные термины. Дисграфия — частичное нарушение процесса письма, при котором возникают стойкие ошибки вследствие недостаточного развития высших психических функций, участвующих в процессе письма.

Термин «аграфия» означает полную неспособность писать. В ряде зарубежных стран (в том числе в США) нарушения чтения и письма определяются одним термином — «дислексия». В других странах (например, во Франции) под термин «дизорфография» подпадают любые специфические нарушения письма. В отечественной литературе различают термины «дисграфия» и «дизорфография» [1].

Нарушения письма изучаются уже более 100 лет, но, несмотря на это, вопросы диагностики и коррекции нарушений письма остаются актуальными и по сей день.

Для дифференциальной диагностики нарушений письменной речи необходимо прежде всего уточнить существующие представления о симптомах и механизмах дисграфии.

При письме задействованы следующие анализаторы: речеслуховой, речедвигательный, зрительный и двигательный. А. Р. Лурия подчеркивает взаимозависимость и тесную связь этих анализаторов [3].

Структура процесса письма зависит от стадии освоения этого навыка, его задач и характера письма.

Устная речь и письменная речь напрямую связаны друг с другом, поэтому письменная речь возможна только на основе высокого уровня развития устной речи.

Зачастую трудности в процессе овладения письмом возникают из-за сочетания группы явлений: биологических недостатков мозговых систем; условия окружающей среды; Мы можем подчеркнуть незрелость психических функций.

После бесед с детьми с нарушениями речи и логопедами было установлено наличие у них аграмматической дисграфии. В ходе интервью выяснилось, что на занятиях с логопедом коммуникативные навыки были низкими. Анализ медико-психолого-педагогических документов (анамнезов) обследованных детей с нарушениями речи показал, что у детей с аграмматической дисграфией в анамнезе имелся логопедический диагноз: общее недоразвитие речи. У детей с нарушениями речи не наблюдается локального поражения центральной нервной системы. В их анамнезе не было четких указаний на какие-либо существенные отклонения в течении беременности и родов. Только у 5 обследованных детей с нарушениями речи после беседы с матерью был выявлен легкий токсикоз второй половины беременности или кратковременная асфиксия в родах. У детей с нарушениями речи, испытывающих трудности в применении фонематико-фонетических и грамматических правил на письме, отмечены черты общей эмоционально-волевой незрелости, слабая регуляция произвольной деятельности.

Используя методику А.В.Семенович «Схема нейропсихологического обследования детей», а также тестовую методику экспресс-диагностики письменной речи детей с речевыми нарушениями (по Т.А.Фотековой, Т.В.Ахутину), проведено развитие письменной речи у детей с Нарушения речи Было проведено диагностическое обследование на предмет нарушения. Диагностическая диагностика позволила оценить состояние коммуникативных навыков, звукового анализа, навыков письма, а также неречевых психических функций у детей дошкольного возраста.

По результатам диагностической оценки письменной речи у детей дошкольного возраста уровень нормального развития письменной речи определяется у 48% детей с дисграфией и у 52% с речевыми нарушениями.

В ходе исследования также изучалось состояние крупной и мелкой моторики у детей с нарушениями речи, принявших участие в пилотном исследовании (см. таблицу 2.2.1).

Из 130 детей 12% (16) выполнили задание самостоятельно и правильно. 87% (114) детей выполнили задание только с объяснением, т.е. повторением, а также под руководством и помощью логопеда.

Задание на определение состояния мелкой моторики выполнили правильно 56% (76) детей, с помощью логопеда – 35% (46) детей, при этом наличие синестезии выявлено у 6% (8) детей.

Таблица 2.2.1 Результаты исследования состояния общей и мелкой моторики

№	**Задания**	**Общее количество детей, процентов**	**Общие моторные навыки**	**Мелкая моторика**
			количество детей, процент	**количество детей, процент**
1.	Пальчиковые игры с произношением детских песень, скороговорок, стихов	130	16	76
		%	12%	56%
2.	Пальчиковая гимнастика — специальные упражнения без речевого сопровождения, входящие в комплекс гимнастики для развития мелкой моторики рук.	130	114	46
		%	87%	35%
3.	Деятельность с игрушками и предметами	130	0	8
		%	0%	6%

Ниже представлена информация о результатах исследования состояния импрессивного аграмматизма.

Это важный критерий в обучении грамоте методами фонематического и артикуляционного анализа и синтеза. Дефицит способностей к анализу и синтезу, пространственному восприятию, зрительно-слуховой дифференциации звуков речи приводит к неправильному восприятию ребенком звуков и, как следствие, к искаженному произношению звуков или замене букв на письме.

По результатам анализа результатов тестирования навыков фонематического анализа у детей с нарушениями речи при дисграфии, 5% (7) детей правильно и без посторонней помощи выполнили задание на определение техники написания букв путем выделения звуков из слов, а 24% (10) детей % (32) детей допустили индивидуальные ошибки и исправили их, 29% (33) детей выполнили задание с нескольких попыток, 24% (32) детей выполнили задание через совместное проговаривание, 20% (26) детей не смогли выполнить задание.

По результатам выполнения задания по ознакомлению с буквенной формой звукового символа на письме у 6% (8) детей фонематическое восприятие и навыки письма были полностью сформированы, а 23% (30) детей допустили ошибки. при выполнении заданий., но исправляли свои ошибки самостоятельно, 30% (40) детей выполнили задания неправильно, 27% (36) детей пытались выполнить их с помощью учителя, а 12% (16) детей дети вообще не смогли их выполнить.

По результатам тестирования слуховой памяти и понимания речи при аграмматизме при коррекции акустической дисграфии 7% (10) детей поняли содержание задания и выполнили его правильно, а у 18% (24) детей не выявлено нарушений фонематического слуха, но у них были выявлены нарушения понимания речи при аграмматизме. испытывали трудности с письмом и допускали ошибки при последовательном выполнении заданий, 30% (41) детей имели недостатки слуховой памяти, 33% (43) детей выполнили задание с помощь учителя, 9% (12) Ребенок вообще не смог справиться с заданием.

Дети, самостоятельно и правильно выполнившие задание по формированию элементов письма при повторении слогов с противопоставленными звуками - 13% (18), допустили ошибки при выполнении заданий, но смогли исправить свои ошибки самостоятельно без дополнительных вопросов. заикающихся – 24% (32), детей, выполнивших задания неправильно – 26% (34), детей, выполнивших задание с помощью учителя – 29% (34), 9% (12) детей справились с заданием на 100%. все не смогли.

Формирование правильных движений руки при письме при динамической дисграфии было полностью сформировано у 4% (6) детей, у 29% (34) детей в отдельных случаях отмечался дефицит при аграмматической дисграфии. При исследовании артикуляционного анализа и синтеза фонем, допустили отдельные ошибки при выполнении заданий, 26% (34) детей допустили ошибки при аграмматической дисграфии, при изучении фонематического артикуляционного анализа и синтеза, при выполнении заданий, при определении ошибок в написании букв по числу звуков в слове, при обнаружении произносимого звука испытывают затруднения в нахождении и написании нужного слова, 29% (33) детей справились с заданием с помощью учителя, 14% (18) детей не смогли справиться с заданием вообще (см. таблицу 2.2.2).

В процессе анализа результатов экспериментально-тестовых исследований нами изучены средние показатели состояния фонематического анализа при дисграфии у детей 5-7 лет с дисграфией. У 26% детей полностью сформированы навыки письма при фонематическом восприятии и развит фонематический слух; При фонематическом восприятии навыки письма были достаточно развиты, но допускали ошибки при выполнении заданий, связанных с противопоставлением звуков и разнослогов, но самостоятельно исправляли свои ошибки и в некоторых случаях усвоили недостатки аграмматической дисграфии. 26% детей сделали отдельные ошибки при выполнении заданий на проверку артикуляционного анализа и синтеза фонем в процессе обучения; фонематическое восприятие навыков письма не сформировано в полной мере, неправильно выполняют задания, связанные с противопоставлением звуков, разнослоговые, а при исследовании аграмматической дисграфии выполняют задания, связанные с артикуляционным анализом и синтезом фонем по количеству звуков в слове.

Дети, которые испытывали трудности с распознаванием букв, не могли подобрать слово, соответствующее слышимому ими звуку, и имели недостатки в навыках письма при фонематическом восприятии, составили 45%.

Таблица 2.2.2. Результаты тестирования состояния фонематического анализа при дисграфии

№	**Задания**	**количество детей, процент**	**состояние фонематического анализа при дисграфии**				
			5 баллов	**4 баллов**	**3 баллов**	**2 баллов**	**1 баллов**
			bola soni	bola soni	Bola soni	bola soni	Bola soni
1.	Определение техники написания букв путем отделения звуков от слов	130	7	32	33	32	26
		%	5%	24%	29%	24%	20%
2.	Знакомство с буквенной формой звукового символа в письменной форме	130	8	30	40	36	16
		%	6%	23%	30%	27%	12%
3.	Тестирование слуховой памяти и понимания речи при аграмматизме в коррекции акустической дисграфии	130	10	24	41	43	12
		%	7%	18%	30%	33%	9%
5.	Образование элементов письма при повторении слогов с противопоставленными звуками	130	18	32	34	34	12
		%	13%	24%	26%	26%	9%
6.	Навыки письма в элементарном звуковом анализе	130	6	34	34	38	18
		%	4%	26%	26%	29%	14%

В ходе экспериментального исследования также изучалось развитие навыков письма при фонематическом восприятии у детей с нарушениями речи. Результаты данного экспериментального исследования представлены в таблице ниже (см. таблицу 2.2.3).

Как видно из таблицы, детей с нормальным развитием навыков письма по звукопроизношению и фонематическому восприятию не было, детей с недостатками навыков письма по звукопроизношению и фонематическому восприятию было 87% (114), детей с недостатками навыков письма по звукопроизношению и фонематическому восприятию было 11% (114) с недостатками звукопроизношения.

Дети с нормальными навыками письма по фонематическому восприятию составили 12% (16 детей), а детей с нормальным произношением звуков и недоразвитыми навыками письма по фонематическому восприятию выявлено не было. В ходе обследования не выявлено детей с нормальными навыками письма и фонематического восприятия, имеющих недостатки в звукопроизношении.

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АКТУАЛЬНОСТЬ РАЗРАБОТКИ КОНЦЕПТУАЛЬНОГО ПОЛОЖЕНИЯ УПРАВЛЕНИЯ ГОСУДАРСТВЕННЫМИ АКТИВАМИ

Аннотация. *Учитывая возрастающее значение разработки концептуального положения, мы провели исследование, показали само понятие концепции. Проведенный анализ позволяет оценить уровень разработки концепции, ее роль и актуальность в достижение эффективности управления государственными активами.*

Ключевые слова*: Концепция, активы, приоритет стратегия, управление, акционерное общества (АО), общества ограниченной ответственности (ООО), контроль.*

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THE RELEVANCE OF THE DEVELOPMENT OF THE CONCEPTUAL POSITION OF PUBLIC ASSET MANAGEMENT

Abstract. *Given the increasing importance of developing a conceptual position, we conducted a study and showed the very concept of the concept. The analysis allows us to assess the level of development of the concept, its role and relevance in achieving the effectiveness of public asset management.*

Keywords: *Concept, assets, priority strategy, management, joint stock company (JSC), limited liability company (LLC), control.*

Эффективное управление государственной собственностью является одной из важнейших проблем функционирования экономики, так как, затрагивает все вопросы материально-технического обеспечения государственного управления во всех сферах его деятельности. При этом, важно установление единого концептуального подхода к управлению государственными активами, исходя из стратегического видения на среднесрочную и долгосрочную перспективу задач государства, направленных на социально-экономическое развитие страны.

В Республике Узбекистан был принят указ Президента Республики Узбекистан № 158 от 11 сентября 2023 года, утверждена стратегия "Узбекистан-2030". В стратегии "Узбекистан — 2030" поставлена цель последовательного перевода монопольных сфер на рыночные принципы, увеличения доли частного сектора в экономике, создания максимально благоприятных условий для свободной деятельности предпринимателей. В рамках этой цели предусмотрено довести долю негосударственного сектора в экономике до 85 процентов, сократить количество 2,3 тысячи предприятий с государственной долей в 6 раз [1]. Кроме того, в соответствии с целевыми показателями по реализации стратегии управления и реформирования предприятий с государственным участием на 2021-2025 годы, утвержденными постановлением Кабинета Министров № 166 от 29 марта 2021 года, поставлена задача по сокращению предприятий с государственным участием до 75 процентов к 2025 году [2].

Концепция определяет стратегию действий. В отличии от стратегии, устанавливающей оптимальное распределение ограниченных ресурсов по взаимоконкурирующим потребностям государства и планирующая осуществление важных шагов и мероприятий, концепция является способом мышления, представляющая из себя комплекс взаимосвязанных приоритетов дальнейшего развития, и характеризующая парадигму, исходя из которой и разрабатывается стратегия.

Процесс рыночных преобразований в Узбекистане подошел к такому периоду времени, когда назрела необходимость пересмотреть приоритеты и принципы государственной политики в области управления и распоряжения государственным имуществом, разработать новые подходы к реализации этой политики в соответствии с изменениями в экономике страны, происшедшими в последние годы.

Целю разработки Концептуальных положений управления государственными активами является определение основных приоритетов государственной политики в области управления государственным активами на среднесрочную перспективу, а также основных направлений реализации данной политики.

Разработка и принятие Концептуальных положений **актуально** тем, что они могли бы обозначить наиболее приоритетные на данном этап развития Узбекистана направления управления государственными активами, сформулировать обобщенные взгляды на данный вопрос, дать инструмент для осмысления значимости достигнутых результатов и задать рамки планирования при разработки стратегии в области управления государственными активами.

В последние годы Узбекистан осуществил значительные реформы, включая либерализацию ряда секторов экономики и улучшение условий для развития частного сектора.

В 2023 г. правительство инициировало ряд важных изменений. В частности, был создан независимый регулятор в энергетическом секторе и начата реформа тарифов на электроэнергию. Был реструктуризирован государственный оператор железных дорог, приватизированы крупное государственное химическое предприятие и некоторые государственные банки, что способствовало развитию большей конкуренции в соответствующих отраслях.

К ключевым стратегиям в этой области относятся меры по дальнейшему уменьшению доминирования госпредприятий в экономике, укреплению прав собственников на землю, дерегулированию телекоммуникационного сектора и торговли сырьевыми товарами, а также меры по снижению издержек в торговле за счет улучшения логистики и транспортной связанности. Кроме того, для создания условий, направленных на ускорение темпов производства и повышение производительности в различных секторах экономики, необходимо увеличить инвестиции в развитие производственного потенциала отраслей народного хозяйства.

Вместе с этим, за последние годы в республике были приняты ряд нормативно-правовых документов, касающихся вопросов управления государственными активами, был принят Закон Республики Узбекистан «Об управлении государственным имуществом» и Закон «О приватизации государственного имущества».

В соответствии с Постановлением Кабинета Министров № 166 от 29 марта 2021 года «Об утверждении стратегии управления и реформирования предприятий с государственным участием на 2021 — 2025 годы» реализованы ряд мер по совершенствованию и улучшению корпоративных отношений в предприятиях с государственным участием.

В настоящее время в Республике Узбекистан действуют около 29706 предприятий с государственным участием, из них 254 акционерные общества,.452 государственные предприятия,1411 общества ограниченной ответственности, 27589 государственные учреждения.

Из 680 существующих в республике акционерных обществ 38,5% (262) имели государственную долю, при этом 80,3% от общего числа акций принадлежали государству, а чуть более 2% населения владели акциями.

Последние годы (2017-2023) утверждены комплексные меры, направленные на сокращение участия государства в экономике, внедрение современных принципов корпоративного управления на предприятиях с государственным участием, повышение приоритетной роли частной собственности и ее надежной защиты.

В частности, структурные изменения проводятся в гражданской авиации, энергетическом секторе, горнодобывающей и металлургической промышленности, электротехнической промышленности, дорожностроительном секторе, производстве строительных материалов, сельском хозяйстве и других отраслях экономики.

В то же время правила корпоративного управления для предприятий с государственным участием, разработанные на принципах Организации экономического сотрудничества и развития, были внедрены более 60 предприятиях с государственным участием, и началась практика избрания (назначения) руководителей 392 предприятиях.

Увеличена число независимых членов в составе наблюдательных советов 140 предприятиях с государственным участием. Начато процесс ликвидации 382 предприятиях (бесперспективных, нефункционирующих, работающих в убыток производств). Проведена оценка системы корпоративного управления. 120 предприятиях с государственным участием. Организованы комитеты при наблюдательных советах 140 предприятиях с государственным участием.

В то же время, пока еще полностью не решены задачи оптимизации, исходя из принципа минимальной достаточности, масштабов государственного участия в различных отраслях и сферах экономики страны на нынешнем этапе се развития, создания высокоэффективных систем управления государственными унитарными предприятиями, пакетами акций и другими объектами государственной собственности.

Анализ, действующий системы управления государственными активами на наш взгляд, позволяет констатировать, что работа в данном направлении имеет следующие основные недоработки:

- нерегулярный характер работы, членов наблюдательного совета в хозяйственных обществах, что не позволяет им знать состояние дел и принимать соответствующие решения, обеспечивающие защиту интересов государства в управлении государственными активами;

- недостаточно эффективное использование членами наблюдательного совета в органах управления хозяйственных обществ своих полномочий, в случае критического состояния дел в обществе, (инициирование созывов наблюдательного совета с детальной проработкой ситуации, нерациональное ведение финансово-хозяйственной деятельности, включение в повестку дня органов управления вопросов о состоянии задолженности и мерах по ее погашению и т.д.);

- недостаточная профессиональная подготовка членов наблюдательного совета особенно в части знания действующего законодательства, что в ряде случаев приводит к малообоснованным их действиям в органах управления предприятиях с государственным участием;

Имеющиеся недоработки в системе государственного управления не позволяют обеспечить надлежащее реагирование на растущие запросы общества, решение накопившихся проблем на местах, опережающее развитие экономики и, как следствие, достижение ожидаемых положительных изменений в жизни людей.

В этой связи особое значение приобретает формирование концептуально новой модели управления государственными активами. При этом, на наш взгляд, необходимо:

определить цели управления по каждому объекту или группе однородных объектов государственного имущества;

определить, по отношению к каждому объекту (группе однородных объектов) государственного имущества, орган, уполномоченный выполнять функции собственника;

классифицировать объекты государственной собственности по признакам, определяющим выбор способа управления;

разработать детальную правовую регламентацию процедур управления государственным имуществом и экономическое обоснование выбранного способа управления; обеспечить соблюдение прав и интересов государства как собственника имущества государственных предприятий и организаций, акционеров (участника) хозяйственных обществ;

обеспечить действенный контроль за использованием и сохранностью государственного имущества, а также контроль за деятельностью лиц, привлекаемых в качестве управляющих этим имуществом.

Достижение вышеобозначенных целей и задач требует переосмысления применяемых общих подходов в управлении государственным имуществом и выработки новой парадигмы исходя из смены представлений на достижение эффективности управления государственной собственностью, что рождает необходимость совершенствования его концептуальных основ. Поэтому, разработка и принятие Концептуальных положений может обозначить наиболее приоритетные на данном этапе развития Узбекистана ,обобщенные взгляды на данный вопрос.

Использованные источники:

1. Указ Президента Республики Узбекистан от 11.09.2023 года, № ПФ-158 о стратегии «Узбекистан — 2030».

2. Постановление Кабинета Министров Республики Узбекистан, от 29 марта 2021 года, № 166 «Об утверждении стратегии управления и реформирования предприятий с государственным участием на 2021 — 2025 годы»

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СОВЕРШЕНСТВОВАНИЕ ПРОФИЛАКТИКИ И ЛЕЧЕНИЯ НЕФРОЛИТИАЗА

Аннотация: *Нефролитиаз, или камни в почках, - распространенное урологическое заболевание, характеризующееся образованием твердых камней, чаще всего в почках. Эти камни могут вызывать боль, обструкцию мочевыводящих путей и такие осложнения, как инфекции или повреждение почек. Исследования, направленные на улучшение профилактики и лечения нефролитиаза, имеют важное значение, учитывая его растущую распространенность во всем мире. В связи с высокой частотой рецидивов данного заболевания, негативным влиянием на качество жизни пациентов и нагрузкой на систему здравоохранения необходимость его изучения возрастает. Исследования по профилактике и лечению нефролитиаза важны для общественного здравоохранения. Поскольку распространенность этого заболевания продолжает расти, необходимо сосредоточиться на индивидуальных стратегиях профилактики и инновационных вариантах лечения. Устранение пробелов в знаниях и понимание сложностей образования камней важны для улучшения ухода за пациентами и снижения бремени этого заболевания.*

Ключевые слова: *нефролитиаз, почки, мочекаменная болезнь, инновационные методы лечения.*

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IMPROVING THE PREVENTION AND TREATMENT OF NEPHROLITHIASIS

Abstract: *Nephrolithiasis, or kidney stones, is a common urological disease characterized by the formation of hard stones in the kidneys. These stones can cause pain, urinary tract obstruction, and complications such as infections or kidney damage. Research to improve the prevention and treatment of nephrolithiasis is essential given its increasing global prevalence. The need for this disease is further enhanced by its high recurrence rate, negative impact on patients' quality of life, and increased burden on the healthcare system. Research into the prevention and treatment of nephrolithiasis is of great public health importance. As the prevalence*

of this disease continues to increase, personalized prevention strategies and innovative treatment options are urgently needed. Addressing knowledge gaps and understanding the complexities of stone formation is essential to improve patient care and reduce the burden of this disease.
Keywords: *Nephrolithiasis, Kidney, Urinary stone disease, Innovative methods in treatment.*

ВЕДЕНИЕ

Нефролитиаз, или камни в почках, - заболевание, вызванное твердыми отложениями в почках и мочевыводящих путях. Они могут вызывать различные проблемы в мочевыделительной системе, включая боль, обструкцию мочевыводящих путей и инфекции. Основные причины нефролитиаза во многом сложны и зависят от различных факторов, и их понимание важно для улучшения профилактики и лечения заболевания. Среди причин нефролитиаза важную роль играют генетическая предрасположенность, изменения обмена веществ, потребление воды и привычки питания. Исследования показывают, что некоторые люди могут быть генетически более склонны к нефролитиазу. Например, наличие предрасположенности к образованию оксалатов кальция может передаваться через семена. Изучение этих генетических факторов может помочь сформировать стратегии профилактики и лечения заболеваний. Метаболические факторы также являются одной из основных причин нефролитиаза. Минеральный и электролитный баланс организма, такой как уровень кальция, оксалатов и уратов, влияет на образование мочевых камней. Высокий уровень кальция или оксалатов в моче или низкий уровень цитрата повышают риск образования камней в почках. Таким образом, анализ мочи и метаболические оценки полезны в выявлении проблем с камнями в почках. Пищевые привычки и потребление воды также имеют важное значение в развитии нефролитиаза. Употребление меньшего количества воды может привести к концентрированию мочи и способствовать образованию камней. Кроме того, употребление продуктов с высоким содержанием соли, белка и оксалатов увеличивает риск образования камней. Исследования показывают, что употребление достаточного количества воды в течение дня и поддержание сбалансированной диеты являются эффективными стратегиями профилактики нефролитиаза. Кроме того, на развитие нефролитиаза могут влиять инфекции и другие заболевания, такие как диабет и преддиабет. Эти состояния могут вызвать изменения в мочевыводящих путях и создать благоприятные условия для образования камней. Поэтому лечение инфекций мочевыводящих путей и контроль метаболических заболеваний важны для профилактики нефролитиаза.

Понимание основных причин нефролитиаза и их взаимосвязи имеет важное значение для улучшения стратегий профилактики и лечения заболеваний. Эти знания позволяют разрабатывать специальные планы профилактики и лечения пациентов с учетом индивидуальных факторов риска. В то же время исследования в этой области могут помочь выявить генетические и метаболические особенности и стать основой для разработки новых подходов к профилактике и лечению нефролитиаза в будущем.

Стратегии профилактики и лечения

Нефролитиаз, или мочекаменная болезнь, – распространенная проблема, серьезно влияющая на здоровье человека. Улучшение стратегий профилактики и лечения имеет неотложную важность из-за высокой частоты рецидивов этого заболевания и серьезных последствий для здоровья, которые оно может вызвать. В этом разделе обсуждаются способы профилактики и лечения нефролитиаза, а также пути их улучшения. Стратегии профилактики в основном основаны на правильном питании, достаточном потреблении жидкости и учете индивидуальных факторов риска. Важнейшим фактором профилактики нефролитиаза является увеличение потребления жидкости. Исследования показывают, что употребление не менее 2-3 литров жидкости в день может значительно снизить риск образования камней в почках. Это связано с тем, что употребление большого количества жидкости помогает разжижать мочу, тем самым снижая концентрацию минералов и солей, необходимых для образования камней. С точки зрения питания важна информация о различных продуктах питания и их воздействии. Например, отказ от продуктов, богатых кальцием, оксалатами и пуринами, играет важную роль в профилактике нефролитиаза. С другой стороны, небольшое количество потребления кальция может уменьшить образование камней из оксалата кальция. Также большое количество фруктов и овощей в рационе, особенно цитрусовых, может снизить риск развития нефролитиаза. Другие стратегии профилактики включают прием лекарств. Некоторые исследования, например, показывают, что прием цитрата калия снижает образование камней из оксалата кальция. Этот препарат повышает pH мочи и снижает концентрацию кальция и оксалатов. Однако применение таких препаратов должно осуществляться только под наблюдением врача, поскольку состояние и индивидуальные потребности каждого пациента могут различаться. Стратегии лечения во многом зависят от размера, местоположения и общего состояния здоровья пациента. Если скопившиеся камни небольшие, они часто могут выйти через уретру. Однако для крупных камней могут потребоваться современные методы лечения, такие как экстракорпоральная ударно-волновая литотрипсия (ДУВЛ) или эндоскопическая хирургия. Метод ДУВЛ разбивает камни на мелкие кусочки, что облегчает их прохождение через мочевыводящие пути. Этот процесс является минимально инвазивным и обеспечивает минимальное время восстановления для пациентов. Существуют также инновационные методы лечения. Например, роботизированная хирургия рассматривается как более точный и эффективный метод удаления камней. Такие хирургические методы обеспечивают высокую точность и эффективность защиты здоровья пациента. Для улучшения стратегий профилактики и лечения также важно обучать пациентов и повышать их осведомленность о заболевании. Во многих случаях рецидив заболевания может произойти из-за того, что пациенты не знают своих факторов риска или не ведут здоровый образ жизни. Поэтому крайне важно просвещать пациентов посредством рекомендаций по здоровому питанию, потреблению жидкости и личной гигиене.

Будущие исследования и инновации

Будущие исследования и инновации будут играть важную роль в профилактике и лечении нефролитиаза. Исследования в этой области могут изменить будущую картину нефролитиаза благодаря новым технологиям и инновационным подходам. Давайте подробнее рассмотрим эти исследования и инновации. Во-первых, генетические исследования являются важным фактором причин и развития нефролитиаза. В настоящее время изучение генетических факторов риска помогает разработать индивидуальные подходы к вероятности заболевания. Например, определенные гены, такие как рецептор альдостерона и другие гены, связанные с мочекаменной болезнью, могут повышать риск развития нефролитиаза. С помощью геномного анализа также можно дать персональные профилактические рекомендации.

Во-вторых, разработка новых биомаркеров и методов диагностики увеличит возможности раннего выявления и лечения нефролитиаза. Инновационные технологии, такие как искусственный интеллект и анализ данных, позволяют с высокой точностью прогнозировать прогрессирование заболевания и разрабатывать персонализированные планы лечения. Это, в свою очередь, делает процесс профилактики и лечения заболеваний эффективным.

В-третьих, исследования и инновации особенно сосредоточены на важности потребления воды и влиянии различных питательных веществ. Например, такие вещества, как кальций, оксалат и натрий, могут повышать концентрацию инфекционных агентов. Исследования показывают новые способы предотвращения нефролитиаза путем увеличения потребления воды и разработки рекомендаций по питанию. Кроме того, новые методы лечения и технологии, такие как лазерная литотрипсия, роботизированная хирургия и другие минимально инвазивные методы, могут повысить эффективность лечения нефролитиаза. Благодаря этим методам процесс лечения заболевания становится удобнее и быстрее.

Исследователи также разрабатывают и тестируют новые препараты для профилактики нефролитиаза. Эти препараты могут помочь уменьшить образование камней за счет усиления воздействия таких веществ, как цитрат кальция и цитрат калия.

Инновационные подходы также следует внедрять посредством информирования и просвещения общественности в области профилактики заболеваний. Просвещение людей по вопросам их здоровья и предоставление информации о правильном питании, потреблении жидкости и других профилактических мерах имеет важное значение для профилактики нефролитиаза. Будущие исследования и инновации также должны быть сосредоточены на решении глобальных проблем нефролитиаза. Например, заболеваемость нефролитиазом быстро растет в развивающихся странах, поэтому в этих регионах необходимы инновационные и адаптированные подходы.

Инновационные методы лечения и их эффективность

Нефролитиаз, то есть заболевание мочекаменной болезнью, считается одной из актуальных проблем современной медицины. Оценка инновационных методов лечения и их эффективности важна в профилактике и лечении нефролитиаза. В этом разделе рассмотрены новейшие инновационные технологии, применяемые для лечения нефролитиаза, их преимущества и недостатки, а также результаты в клинических исследованиях и практике. Инновационные методы лечения нефролитиаза включают минимально инвазивную хирургию, а также новые лекарства и стратегии лечения. Например, роботизированная хирургия обеспечивает большую точность и скорость по сравнению с традиционными методами. Этот хирургический метод ускоряет процесс выздоровления пациентов и сокращает сроки пребывания в стационаре. Кроме того, важную роль играют лекарства и их совокупное воздействие. Например, добавки цитрата калия используются для предотвращения образования камней из оксалата кальция. Исследования показывают, что риск образования камней у пациентов значительно снижается при употреблении цитрата калия. В то же время новые фармакологические подходы, такие как антидиуретические гормоны и диуретики, оказывают сильное влияние на профилактику нефролитиаза. При оценке инновационных методов лечения очень важно определить их клиническую эффективность. Этого можно достичь посредством клинических испытаний. Например, исследования, проводимые с конца 20 века, подтвердили эффективность роботизированной хирургии по сравнению с традиционными методами. Оценивались такие параметры, как удовлетворенность пациентов, время послеоперационного восстановления и количество осложнений. Также проводятся многоцентровые исследования для проверки эффективности и безопасности новых лекарств. Для повышения эффективности инновационных методов важно использовать междисциплинарный подход. Это означает, что нефрологи, урологи, диетологи и другие специалисты должны работать вместе. Разработка и внедрение индивидуального подхода к пациентам также является обязательным условием профилактики и лечения заболеваний. В связи с этим необходимо дать рекомендации по режиму питания, потреблению жидкости и образу жизни больных. Ожидается, что в будущем новые технологии, такие как 3D-печать и системы на основе искусственного интеллекта, будут внедрены в усовершенствование инновационных методов лечения. Эти технологии помогают еще больше улучшить хирургические процедуры и обеспечить пациентам более качественные услуги. За счет правильно подобранных инновационных подходов можно повысить эффективность профилактики и лечения нефролитиаза, что улучшит качество жизни пациентов.

ЗАКЛЮЧЕНИЕ

Исследования на тему совершенствования профилактики и лечения нефролитиаза дают исчерпывающую информацию о причинах этого заболевания, стратегиях профилактики и лечения, а также инновационных подходах. Результаты исследований показывают, что нефролитиаз серьезно влияет не только на физическое здоровье, но и на психологическое состояние больных. Поэтому необходимость разработки новых стратегий профилактики и лечения этого заболевания, несомненно, является актуальной проблемой.

Исследования показали, что с помощью инновационных методов лечения, включающих современные технологии и препараты, можно добиться значительного прогресса в эффективном лечении нефролитиаза. Например, процесс экстракорпоральной ударно-волновой литотрипсии (ЭУВЛ) играет важную роль в лечении заболевания и имеет большое значение в улучшении качества жизни пациентов.

Будущие исследования должны быть сосредоточены на изучении генетических, метаболических и экологических факторов нефролитиаза. Также важно разработать специальные индивидуальные подходы к профилактике и лечению пациентов, чтобы предотвратить развитие заболевания. Исследования и инновации, связанные с нефролитиазом, могут не только улучшить здоровье пациентов, но и привести к положительным изменениям в системе здравоохранения в целом. В целом совершенствование профилактики и лечения нефролитиаза важно не только для медицинской сферы, но и для нашего общества. По результатам этих исследований стоит подчеркнуть необходимость разработки более глубоких и многоплановых подходов в системе здравоохранения. Такие подходы помогают обеспечить лучшее будущее для пациентов и их семей.

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БУҒДОЙ ДОНИНИ КОМБИНАЦИЯЛАНГАН ИСИТИШ ОРҚАЛИ ОЗУҚАЛИК ДАРАЖАСИНИ ОШИРИШ

Аннотация: *Иссиқлик билан ишлов бериш жараёнида буғдой донининг маҳаллий крахмаллари ўзгартирилган крахмалга айланади. Шакар ва декстринларнинг таркиби 2-3 баробар ортади, клейстеризацияланиш даражаси 35% ва ундан юқори даражага етади. Комбинациялашган усулда термик ишлов бериш орқали дон хом ашёсининг озуқабардорлиги ортишини кўрсатиб бериш мазкур илмий ишнинг мақсадидир.Чунки дон озуқасини "қайта ишланган" буғдой билан алмаштириш парвариш қилинаётган ҳайвонларнинг ўсишига ижобий таъсир кўрсатади, уларнинг маҳсулдорлиги ортади.Дон маҳсулотларини қайта ишлаш жараёнини такомиллаштириш борасидаги тадқиқотларни илмий асосда ташкил этилиши қишлоқ хўжалигида ишлаб чиқариш самарадорлигини янада ошишини таъминлайди. Ушбу мақолада дон маҳсулотини инфрақизил (ИҚ) нурланиш билан нурлантириш орқали қайта ишлашнинг давомийлиги ҳақида маълумотлар келтирилади.*

Таянч сўзлар: *инфрақизил нурланиш, фермент, микроинизация, экструзия, микротўлқин, крахмал, клейстерезация, декстринизация.*

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КОМБИНИРОВАННЫЙ НАГРЕВ ЗЕРНА ПШЕНИЦЫ ЧЕРЕЗ ПОВЫШЕНИЕ УРОВНЯ ПИТАНИЯ

Аннотация: *При термической обработке нативные крахмалы зерна пшеницы превращаются в модифицированные крахмалы. Содержание сахара и декстринов увеличивается в 2-3 раза, уровень кристаллизации достигает 35% и выше. Цель данной научной работы – продемонстрировать повышение пищевой ценности зернового сырья за счет комбинированной термической обработки. Поскольку замена зерновых кормов «переработанной» пшеницей положительно влияет на рост животных, за которыми ведется уход, повышается их продуктивность. Организация обеспечивает дальнейшее повышение эффективности производства в сельском хозяйстве. В данной* *статье представлена информация о продолжительности обработки зернопродуктов инфракрасным (ИК) излучением.*

Ключевые слова: *инфракрасное излучение, фермент, микроинизация, экструзия, микроволновое излучение, крахмал, клейстеризация, декстринизация.*

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INCREASING THE NUTRITION LEVEL OF WHEAT GRAIN BY COMBINED HEATING

Annotation: *In the issıklik bilan ışlov birşış process, the local starches of the wheat grain turn into burnt starch. The composition of sugar and dextrins is 2-3 times higher, the degree of gelatinization reaches 35% or more. The purpose of this scientific work is to demonstrate the increase in the nutritional value of wheat grain through thermal processing in a combined method. Because replacing wheat grain with "recycled" wheat has a positive effect on the growth of the animals being raised, it increases their productivity. This article provides information on the duration of the processing of grain products by infrared (IR) radiation.*

Key words: *infrared radiation, enzyme, microinization, extrusion, microwave, starch, gelatinization, dextrinization.*

Асосий қисм: Дон мураккаб термодинамик тизим ва тирик организм сифатида атроф-муҳит билан фаол ўзаро таъсир қилади ва қўлланиладиган ташқи таъсирга жавоб сифатида унинг хусусиятлари ва тузилишида ўзгаришларга учрайди. Донда намлик ва ҳарорат ўзгарганда, физик-кимёвий ва биокимёвий табиатнинг мураккаб жараёнлари ривожланади: дон маҳсулотини суғориш пайтида шишиши, доннинг фермент тизимининг фаоллашиши каби жараёнлар юз беради. Натижада, доннинг биокимёвий хусусиятларининг уни қайта ишлаш параметрларига мувофиқ кўпроқ ёки камроқ сезиларли ўзгариши содир бўлади; шу туфайли доннинг озуқавийлик қиймати ҳам ўзгаради.

Буғдой хом ашёси таркибидаги ҳайвонлар учун зарарли ферментларни камайтириш мақсадида термик ишлов беришнинг турли хил усуллари мавжуд: инфрақизил иситиш (микронизация), қовуриш, экструзия, микротўлқинли ишлов бериш ва бошқалар [1-3]. Уларнинг ичида инфрақизил (ИҚ) нурлан билан ишлов бериш ва электр иситиш (ЭИ) усуллари кенг тарқалган.

1.Микроионизация жараёни. Микронизация жараёнининг параметрларидан бири бу микронизаторда донни қайта ишлаш давомийликдир: бу унинг ишлашини, шунингдек, аралаш озуқаларнинг таркибий қисми сифатида унинг юқори технологик хусусиятларини таъминлайди. Ушбу жараён давомийлигининг оптимал қийматини доннинг оптик ва термодинамик хусусиятлари бўйича олинган экспериментал натижалар асосида аниқлаш мумкин.

Дон маҳсулоти томонидан сўрилган иссиқлик миқдорини қуйидаги ифода билан аниқлаш мумкин:

$$Q = \alpha \cdot S_з k_\lambda \cdot \Delta t \cdot \tau, \quad (1)$$

a -иссиқлик узатиш коеффициенти, кДж/ м-°С,

Sз- доннинг самарали юзаси бўлиб, ИҚ - қайта ишлаш жараёнида ёрқин энергияни фаол равишда ютилиши, м2,

Δt - микронизация пайтида дон ҳароратининг ошиши, °С,

τ – қайта ишлаш вақти, с.

Жараённинг таҳлили шуни кўрсатадики, донни микронизаторда қайта ишлаш бир қатламда содир бўлганда, дон сиртининг тахминан 1/2 қисми иссиқликни ютишда иштирок етади. Битта дон учун доннинг ташқи юзаси майдонини аниқлашда энг ишончли натижа Г. А. Егоров формуласи билан аниқланди [4]:

$$S = 1{,}12\alpha^2 + 3{,}76b^2 + 0{,}88l^2 - 10, \quad (2)$$

бу ерда a, b. l доннинг кенглиги, қалинлиги ва узунлиги, м.

Бундай ҳолда, 1 кг доннинг ўзига хос ташқи юзаси битта дон сирт майдонининг 1 кг дон сонига кўпайтмаси ҳисобланади:

$$S_{nis} = S \cdot n, \quad (3)$$

бу ерда n - 1 кг доналар сони-1000 дон массасининг қийматига қараб, қуруқ вазнга айланмасдан, яъни мувозанат намлигида аниқланади:

$$n = \frac{M}{m_{1000}}. \quad (4)$$

Ҳисоблаш учун қуйидаги қийматларни оламиз:

a = 25 кДж / м·с· °С,

k_λ= 0.1103 1 / м,

Δt= 100 °С, бу донни 20 °С дан 120°С гача иситишни англатади.,

m_{1000} = $4 \cdot 10^{-6}$ кг,

n = 1: 40· 10^{-6} = 25000 дона,

S = 55.3 · 10^{-6} м^2

Sз = 0.5 · S = 28· 10^{-6}м^2.

Бошқа томондан, дон томонидан сўрилган иссиқлик миқдорини қуйидаги формулага мувофиқ жараённинг иссиқлик баланси асосида топиш мумкин:

$$Q = m \cdot c \cdot \Delta t, \quad (5)$$

бу ерда t-доннинг массаси (бу ҳолда 1 кг), c-доннинг солиштирма иссиқлик сиғими, кДж/кг · °С.

Бу ҳолатда c = 2,60 кДж/кг°С деб олинади. 100 °С да иситиш учун ушбу қийматдан фойдаланиб, керакли миқдордаги иссиқликни аниқланади:

$$Q = 1{,}0 \cdot 2{,}60 \cdot 100 = 260\ кДж.$$

Юқоридаги ифодаларни тенглаштириб, микронизаторда донни қайта ишлаш давомийлиги учун қуйидаги ифодани топамиз:

$$\tau = \frac{m \cdot c}{\alpha \cdot S_з \cdot k_\lambda}. \qquad (6)$$

Унга киритилган миқдорларнинг ўзига хос қийматларини алмаштириб, биз микронизаторда экспериментал ишлов бериш шароитида доннинг ҳароратини 20 ℃ дан 190 ℃ гача ошириш учун 37 с талаб қилинишини аниқлаймиз.

Бу қиймат оптимал ҳисобланади. Донни қайта ишлаш ушбу режимда амалга оширилди. Шу билан бирга, крахмалнинг клейстерезацияси ва декстринизацияси туфайли маълум ҳажмда доннинг хусусиятларига керакли таъсир чуқурлигига эришилади, унинг озуқавий қиймати ошади.

Бу жараён, айниқса, донни ИҚ нурланиши билан қайта ишлашда ёки бундан ташқари, унинг микронизация жараёни шароитида яққол намоён бўлади. Донни юқори ҳароратгача тез қиздириш билан доннинг шишиши ёки ҳатто тўлиқ деформацияси ва унинг ёрилиши содир бўлади.

2. Микронизация пайтида донни иситишнинг математик модели. Маълумки [5] модданинг доимий атроф-муҳит ҳароратида ёпиқ майдонда исиши қуйидаги тенглама билан тавсифланади:

$$\frac{mc}{\alpha F}\frac{d(t_i - t_o)}{d\tau} + (t_i - t_o) = \frac{P}{\alpha F}, \qquad (7)$$

Бунда m-модданинг массаси,
c-модданинг ўзига хос иссиқлиги,
t_i, t_o, -атроф-муҳит ҳарорати i ва t_o моддасининг дастлабки ҳарорати ўртасидаги фарқ.
P-вақтнинг дастлабки моментида иситгичдан моддага сакраш билан таъминланган иссиқлик оқимининг кучи *t = 0,*
a-муҳитдан моддага иссиқлик узатиш коэффициенти,
F-келтирилган иссиқлик узатиш юзаси.

Бундай ҳолда, модданинг ҳароратининг ўзгариши қуйидаги тенглама билан аниқланади:

$$t(\tau) = t_0 + \frac{P}{\alpha F}\left[1 - exp\left(\frac{\tau}{K}\right)\right] \qquad (8)$$

Бу ерда $K = \frac{mc}{\alpha F}$ -доимий катталик.

Бундан келиб чиқадики, К қиймати қанчалик юқори бўлса, маҳсулотни (моддани) иситиш секин содир бўлади.

Шунинг учун маҳсулотни иситиш тезлиги, яъни вақт ўтиши билан унинг ҳароратининг ўзгариш тезлиги қуйидаги тенглама билан аниқланади:

$$\frac{dt}{d\tau} = \frac{P - \alpha F \Delta t}{mC} \qquad (9)$$

Бу ерда $\Delta t = (t_i - t_0)$.

Мазкур ифода - бу жараённинг математик моделидир. Ушбу тенгламаларга асосланиб, биз иш комбинациялагн микронизация усули билан донни қайта ишлаш жараёида иситиш тизими давомийлигини аниқлай оламиз.

Ҳисоблаш учун қуйидаги параметрларни оламиз:

Доннинг вазни-1 кг,
Donning солиштирма иссиқлик қуввати 1,85 кДж / кг·град.
Иссиқлик узатиш коэффициенти а = 25 кДж / м$^2 c$.

Нурланиш энергиясини оладиган доннинг юзаси ҳисоблаш йўли билан топилади. Бунинг учун биз доннинг 1000 донасини массасини 40 г га тенг деб оламиз, битта доннинг ташқи юзаси майдони ўртача ўлчамлар (узунлиги 6 мм, қалинлиги 2,5 мм, кенглиги 3 мм) асосида топилади, 47 м^2 га тенг бўлади. Кейин 1 кг доннинг ташқи юзасини умумий майдони қуйидагини ташкил этади:

$$F_{\Sigma} = \frac{47 \cdot 10^{-6} \cdot 1000}{40 \cdot 10^{-3}} = 1{,}2 м^2.$$

Қабул қиламизки, доннинг ташқи юзасини фақат ярми нурланишни қабул қилади, шунинг учун у бу қисм иссиқликни ютиш жараёнида иштирок етади:

$$F_{эф} = 1{,}2 \cdot 0.5 = 0{,}6 м^2.$$

Ушбу маълумотларга асосланиб, биз доимий К қийматини топамиз:

$$K = 0{,}106 \text{ с.}$$

Физик маънода К доимий қиймати иситиладиган маҳсулотнинг ҳарорати 1 даражага ошадиган вақтни белгилайди. Маълум бўлишича, 36 сонияда, яъни, доннинг ёрилишидан олдин унинг ҳарорати тахминан 330 ℃ га ошади. Бу натижа тажрибадаги доннинг физик ўлчанган ҳароратидан ошиб кетади. Шубҳасиз, бу доннинг ташқи юзасининг 0,5 дан камроғи иссиқликни ютишда иштирок етиши билан боғлиқ.

Агар бу қиймат дон юзасининг атиги 1/3 қисмини ташкил қилади деб ҳисобласак, К доимийлигининг қиймати 0,247 га тенг бўлади ва 36 сонияда дон ўз ҳароратини 142 даражага оширади. Бу натижа экспериментал маълумотларга яқиндир. Демак, дон маҳсулоти ИҚ нур билан нурланганда, ташқи юзанинг учдан бир қисми нурланиш энергиясини ютади.

Ушбу ҳисоблаш жараёнида доннинг иссиқлик-нурланишини ўтказувчанлиги ва акс етиши ҳисобга олинмайди, бу маълум бир тарзда доннинг қизишига таъсир қилади. Бу кўрсаткичларни ҳисобга олиш орқали тажриба шартларини қониқтирадиган натижаларни олиш мумкин.

Хулоса:

1.Дон маҳсулотини комплекс иссиқлик ва ИҚ нурлантириш орқали озуқабардошлиги ортиши кўрсатиб берилди.

2. Дон маҳсулотини микроионизация жараёни параметрлари аниқланди.

3. Микронизаторда донни қайта ишлаш давомийлигини аниқлашнинг математик ифодаси яратилди.

4. Микронизация пайтида донни иситишнинг математик модели яратилди.

5. Маҳсулотни (моддани-донни) иситиш жараёни тезлигини белгиловчи коэффициент К доимийсининг қиймати аниқланди.

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РАЗВИТИЕ КОГНИТИВНЫХ ТЕХНОЛОГИЙ И ИХ ВЛИЯНИЕ НА ЭКОНОМИКУ И ПРОИЗВОДСТВО

Аннотация. *В статье описывается значительный рост интереса к когнитивным технологиям и их применению в различных сферах. Цифровая трансформация экономики, связанная с развитием когнитивных технологий и информационных технологий, оказывает значительное влияние на экономический рост и конкуренцию на мировых рынках.*

Ключевые слова*. Когнитивные технологии, искусственный интеллект, моделирование, облачные технологии, цифровые технологии*

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THE DEVELOPMENT OF COGNITIVE TECHNOLOGIES AND THEIR IMPACT ON THE ECONOMY AND PRODUCTION

Annotation. *The article describes a significant increase in interest in cognitive technologies and their application in various fields. The digital transformation of the economy, associated with the development of cognitive technologies and information technology, has a significant impact on economic growth and competition in global markets.*

Keywords. *Cognitive technologies, artificial intelligence, modeling, cloud technologies, digital technologies*

Введение. В последние десятилетия наблюдается растущий интерес к изучению когнитивных процессов. Изначально вопросы, связанные с теорией познания, рассматривались в рамках философии и логики, однако с 1950-х годов внимание психологов было направлено на изучение механизмов восприятия, обучения и памяти. Эти исследования положили основу для развития когнитологии — науки, изучающей механизмы познания с точки зрения психологических и нейрофизиологических данных.

Когнитивные технологии включают в себя широкий спектр технологий, направленных на рационализацию и создание интеллектуальных систем для активизации знаний, опыта, общения и принятия решений. Эти технологии объединяют математические методы, алгоритмы и компьютерные технологии для создания интеллектуальных программно-аппаратных систем, которые могут анализировать естественный язык, формулировать гипотезы и решать другие задачи. Основной целью когнитивных технологий является понимание того, как человек воспринимает и обрабатывает информацию, а также какие когнитивные схемы он способен создавать.

Перспективными направлениями развития когнитивных технологий являются когнитивные препараты, когнитивные ассистенты и виртуальные интерфейсы «мозг-компьютер», которые позволяют интуитивно и доступно управлять компьютерными системами. По оценкам Института развития, мировой рынок когнитивных технологий в ближайшие годы будет расти в среднем на 55% ежегодно и достигнет 31,3 миллиарда долларов в 2020-е годы. Особенно востребованы когнитивные системы в банковском секторе, а также в продажах и здравоохранении, где они активно используются для диагностики, лечения и автоматизации процессов.

Суть когнитивных технологий заключается в том, чтобы выяснить, как человек воспринимает и обрабатывает полученную информацию, какие формы (когнитивные схемы) он может создавать. Когнитивные технологии отличаются от осознания тем, что осознание происходит в новой информационной среде. Это не только люди, природа, технологии, книги, но и компьютеры и сети (социальные и компьютерные). Наиболее перспективными направлениями развития этих технологий являются следующие:

- когнитивные препараты, предназначенные для развития способностей человека, включая интеллект, память; - когнитивные ассистенты – гибкие системы поддержки в различных ситуациях (контроль доступа, автопилот); - виртуальные интерфейсы в виде "мозг - компьютер" - интуитивно понятные, доступные каждому для управления компьютерными системами.

Около 20% глобальных закупок когнитивных систем приходится на банковский сектор. В банках эти системы используются для выявления мошенничества, анализа и автоматизации угроз, а также для предоставления рекомендаций. Второе и третье места в сфере закупок занимают продажи, где когнитивные системы обеспечивают работу автоматизированных агентов по обслуживанию клиентов, продажам и здравоохранению, где они используются в системах диагностики и лечения.

Когнитивное моделирование предназначено для систематизации, анализа и принятия управленческих решений в сложных и неопределенных ситуациях (геополитических, внутренних, военных и т.д.), при отсутствии количественной или статистической информации о процессах, происходящих в таких ситуациях. Когнитивное моделирование помогает лучше понять проблемную ситуацию, выявить противоречия и качественно проанализировать систему. Появление когнитивного подхода связано со сложностью анализа и принятия решений в таких областях, как экономика, социология и экология. В таких системах количество факторов, которые необходимо учитывать при принятии решения, измеряется десятками. Сами факторы находятся в сложном взаимодействии. Часто отсутствует конкретная методология определения коэффициентов измерения, а объем данных недостаточен или носит качественный характер. Из-за особенностей таких систем их называют слабоструктурированными. Одним из определений широко используемого когнитивного моделирования является следующее определение - это метод анализа, способный определять силу и направление влияния факторов на превращение объекта управления в цель с учетом сходств и различий влияния различных факторов на объект управления.

Когнитивное моделирование помогает лучше понять проблемную ситуацию на основе качественного анализа системы. Позволяет выявить проблемы и противоречия, присущие системе. Целью моделирования является формулирование и уточнение гипотезы о функционировании исследуемого объекта, который рассматривается как сложная система, состоящая из отдельных, но взаимосвязанных элементов и подсистем. Когнитивный анализ объекта исследования позволяет:

- видеть общую ситуацию с анализируемой проблемой;
- прогнозировать направление развития системы (ситуации);
- определять факторы, влияющие на развитие ситуации;
- разрабатывать стратегию действий;
- предлагать альтернативные решения проблемы;
- форматировать процесс принятия решений;
- для получения качественных и количественных описаний рассматриваемой ситуации;
- для повышения качества и обоснованности принимаемых решений.

В 2017 году цифровая революция вступила в решающую фазу - каждый второй житель земного шара был подключен к Интернету. Промышленная революция позволила отдельным странам достичь невероятных темпов экономического роста, и на несколько десятилетий они стали лидерами мировой экономики. В настоящее время, в условиях глобализации экономики и развития информационно-коммуникационных технологий, экономики многих стран переходят на новую цифровую форму. Цифровая экономика меняет облик и структуру экономики стран и целых регионов. Конкуренция внутри сети усиливается, рынки сбыта расширяются, повышается конкурентоспособность отраслей некоторых стран на мировых рынках. Цифровая экономика определяет перспективы роста компании, отрасли и национальной экономики в целом. Цифровая трансформация является одним из основных факторов роста мировой экономики. По расчетам глобального института McKinsey, в 2025 году рост валового внутреннего продукта в Китае может быть достигнут на 22% благодаря интернет-технологиям. А в США рост экономики за счет цифровых технологий в 2025 году составит 1,6-2,2 трлн долларов. могут быть равны. Это связано не с автоматизацией экономических прогнозов, а только с существующими процессами, связанными с ними, а с внедрением совершенно новых комплексных моделей работы и технологий. Среди них - цифровые платформы, цифровые экосистемы, группы глубокой аналитики больших данных, например, 3D как технологии индустрии 4.0 - печать, робототехника, Интернет вещей. Четвертая промышленная революция в производстве - это новый фактор экономического роста, который связан с внедрением возможностей для обучения и ценностей, которых раньше не существовало. Внедрение технологий в соответствии с комплексной идеей, направленной на улучшение мира вокруг нас, поможет укрепить глобальную экономику и улучшить экологическое состояние нашей планеты. Основные направления трансформации производства определяются тремя глобальными технологическими тенденциями: сетевой интеграцией, интеллектуализацией и гибкой автоматизацией. Цель состоит в создании систем, которые могут самостоятельно менять машины, когда возникает необходимость.

Заключение. В целом, важно быть осторожным при внедрении этой новой и технологичной области, и во всех случаях следует заранее прогнозировать ожидаемые вероятности. В нашем Узбекистане будет уместно использовать возможности цифровой экономики постепенно и эффективно. Конечно, с течением времени меняется и кругозор людей. Это, в свою очередь, создает основу для появления новых секторов экономики.

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МИНТАҚАЛАРНИНГ ТАБИИЙ ВА ИҚТИСОДИЙ САЛОҲИЯТИ ВА ЯНГИ ТАРМОҚЛАРНИНГ МУВАФФАҚИЯТЛИ РИВОЖЛАНИШИ

Аннотация. *Ушбу мақолада минтақаларнинг табиий ва иқтисодий салоҳияти ва янги тармоқларнинг муваффақиятли ривожланиши, ишлаб чиқариш кучлари табиий ресурслардан самарали фойдаланиш масалалари муҳокама қилинган.*

Калит сўзлар: *минтақа, табиий ресурслар, корхоналар жойлашуви, ишлаб чиқариш кучлари, талаб, таклиф, истеъмол, инфратузилма.*

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NATURAL AND ECONOMIC POTENTIAL OF REGIONS AND SUCCESSFUL DEVELOPMENT OF NEW INDUSTRIES

Abstract. *This article examines the natural and economic potential of regions, the successful development of new industries, and the efficient use of natural resources by productive forces.*

Keywords: *region, natural resources, location of enterprises, productive forces, demand, supply, consumption, infrastructure.*

Кириш. Минтақанинг табиий ва иқтисодий салоҳияти - бу иқтисодий ривожланиш учун ишлатилиши мумкин бўлган табиий ресурслар ва шароитларнинг йиғиндисидир. Ишлаб чиқарувчи кучларнинг ривожланиши минтақанинг табиий ва иқтисодий салоҳиятидан фойдаланишга бевосита таъсир қилади[1]. Ишлаб чиқарувчи кучларнинг ривожланиши билан табиий ресурслардан фойдаланиш таркиби ўзгариб бормоқда. Масалан, саноат ривожланишининг бошида асосий эътибор хом ашёни қазиб олиш ва қайта ишлашга қаратилган. Технологик тараққиёт билан қайта ишлаш тармоқларининг аҳамияти ортиб, хом ашёга кўпроқ қиймат қўшади. Бу руда қазиб олишдан тортиб, юқори технологияли маҳсулотлар ишлаб чиқаришгача бўлган даврни ўз ичига олиб, минтақа табиий ресурсларидан фойдаланишда устувор йўналишларнинг ўзгаришига олиб келиши мумкин.

Тадқиқот методлари. Мақолани тайёрлашда миқдорий усуллар. регрессия таҳлили, индекс таҳлили, вақт кетмакетлиги, тизим таҳлили, тарихий қиёслаш усулларидан фойдаланилган.

Муҳокама ва мулоҳазалар. Тарихий жиҳатдан иқтисодий ривожланишнинг дастлабки босқичлари хом ашёни қазиб олиш ва экспорт қилиш билан тавсифланади. Ишлаб чиқарувчи кучларнинг ривожланиши билан асосий эътибор хом ашёни қайта ишлаш ва тайёр маҳсулот ишлаб чиқаришга қаратилади. Бунинг сабаби, қайта ишлаш юқори қўшимча қийматга эга маҳсулотлар яратиш имконини беради. Мисол учун, мамлакат темир рудасини экспорт қилишдан пўлат ишлаб чиқаришга, кейин эса автомобил ишлаб чиқаришга ўтиши мумкин. Ресурслардан фойдаланиш усулларининг ўзгариши кўпинча иқтисодий диверсификация билан бирга келади. Бир нечта асосий ресурсларга боғлиқ бўлиш ўрнига, минтақа ёки мамлакат турли хил ресурслардан фойдаланган ҳолда турли соҳаларни ривожлантиради[2]. Бу иқтисодиётнинг ташқи таъсирларга, масалан, жаҳон хом ашёси нархларининг ўзгаришига чидамлилигини оширади.

Технологик тараққиёт анъанавий ресурсларни алмаштира оладиган янги материаллар ва технологияларнинг пайдо бўлишига олиб келади. Масалан, пластмассанинг ривожланиши ёғоч ва металл каби табиий материалларга қарамликни камайтирди. Уй хўжаликларининг даромадлари ўсиши билан мураккаброқ ва юқори технологияли товарларга талаб ортиб боради, бу эса ўз навбатида тегишли тармоқларнинг ривожланишини рағбатлантиради ва ресурслардан фойдаланиш таркибини ўзгартиради. Мисол учун, электр транспорт воситаларига талаб ортиб бораётгани аккумулятор ишлаб чиқариш учун зарур бўлган литий ва бошқа ресурсларга бўлган эҳтиёжни оширмоқда.

Ресурсларни самарали бошқариш истеъмолни кузатиш, режалаштириш ва истеъмолни назорат қилишни ўз ичига олади. Бунинг учун ҳисоб ва назорат тизимини жорий этиш, шунингдек, кадрларни ресурслардан тежамкорлик билан фойдаланиш усулларига ўргатиш талаб этилади. Ёпиқ ишлаб чиқариш циклларига ўтиш (айланма иқтисод) чиқиндиларни минималлаштириш ва қайта ишланган материаллардан максимал даражада фойдаланишни ўз ичига олади. Бу материалларни қайта ишлаш ва қайта ишлатишни ўз ичига олади ва шу билан бирламчи ресурсларга боғлиқликни камайтиради.

Ресурслар самарадорлигини ошириш истеъмолчи хатти-ҳаракатларини ўзгартиришга ҳам боғлиқ. Энергия тежамкор маҳсулотлар ва хизматларга талаб ортиб бораётгани, шунингдек, истеъмолчиларнинг чиқиндиларни қайта ишлашга тайёрлиги ишлаб чиқарувчиларни янада самарали технологиялар ва маҳсулотларни ишлаб чиқишга ундайди. Шунингдек, бунда ҳукумат сиёсати ресурслар самарадорлигини оширишни рағбатлантиришда муҳим роль ўйнайди. Бу энергия тежайдиган корхоналар учун солиқ имтиёзларини жорий этиш, ифлослантирувчи моддалар эмиссиясини тартибга солиш ва ресурсларни истеъмол қилиш стандартларини жорий этишни ўз ичига олиши мумкин.

Ҳудудларда янги саноат тармоқларини ривожлантириш комплекс ёндашув ва кўплаб омилларни ҳисобга олишни талаб қилувчи мураккаб жараёндир. Янги тармоқларнинг муваффақиятли ривожланиши иқтисодий ўсиш, янги иш ўринлари яратиш ва турмуш даражасини оширишга хизмат қилади[3]. Бироқ, нотўғри ёндашув ресурслардан самарасиз фойдаланишга ва салбий ижтимоий оқибатларга олиб келиши мумкин. Янги ишлаб чиқариш тармоқларини ўзлаштиришни бошлашдан аввал ҳудуднинг имкониятларини чуқур таҳлил қилиш зарур бўлади. Бу ресурслар (хом ашё, меҳнат, энергия), инфратузилма (транспорт, алоқа), аҳолининг таълим даражаси, шунингдек, инвестиция муҳити ва маҳаллий ҳокимият органлари томонидан қўллаб-қувватланишининг мавжудлигини баҳолашни ўз ичига олади. Ҳудуднинг рақобатбардош устунликларини аниқлаш ва бу афзалликлардан фойдалана оладиган тармоқларни ривожлантиришга эътибор қаратиш мажбуриятини юклайди.

Шу ўринда, истиқболли тармоқларни танлаш бозор талаби, технология тенденциялари ва атроф-муҳитни ҳисобга олиш таҳлилига асосланиши керак бўлади. Бунда жаҳон тенденцияларини ҳисобга олиш ва юқори ўсиш салоҳиятига эга ва атроф-муҳитга минимал салбий таъсир кўрсатадиган тармоқларга эътибор қаратиш муҳимдир. Масалан, ривожланган ахборот инфратузилмасига эга минтақа IT соҳасини ривожлантиришга, бой табиий ресурсларга эга ҳудуд эса яшил энергия ёки қайта ишлаш саноатини ривожлантиришга эътибор қаратиши мумкин. Янги тармоқларни ривожлантириш катта инвестицияларни талаб қилади. Инвестицияларни жалб қилиш учун қулай инвестиция муҳитини яратиш, тартибга солишнинг шаффофлиги ва прогнозлилигини таъминлаш, инвесторларга қулай шарт-шароит ва кафолатларни тақдим этиш мажбуриятини ўртага ташлайди. Бу солиқ имтиёзлари, субсидиялар, махсус иқтисодий зоналар ва кичик ва ўрта бизнесни қўллаб-қувватлаш дастурларини ўз ичига олиши мумкин.

Янги тармоқларнинг муваффақиятли ривожланиши малакали кадрлар мавжудлигига боғлиқ бўлиб, бунда аҳолининг таълим ва касб-ҳунар таълимига сармоя киритиш, замонавий технологиялар ва иш услубларидан фойдаланишни таъминлаш зарурияти олдинга чиқади. Бу махсус таълим дастурларини яратиш, кадрларни касбий қайта тайёрлаш ва малакасини оширишни ўз ичига олиши мумкин. Янги тармоқларни ривожлантириш инфратузилмани яратиш ёки такомиллаштиришни талаб қилади. Бунга автомобил йўллари, темир йўллар, энергия тармоқлари, коммуникация тизимлари ва янги корхоналар фаолияти учун зарур бўлган бошқа инфратузилмаларни қуриш киради, шунингдек, янги тармоқларни ривожлантиришда атроф-муҳитга салбий таъсирни минималлаштириш, ижтимоий адолатни таъминлаш, маҳаллий аҳоли манфаатларини ҳисобга олиш зарур.

Ишлаб чиқарувчи кучларнинг ривожланиши минтақада ишлаб чиқаришнинг фазовий тақсимотини ўзгартириши мумкин. Масалан, янги транспорт технологияларининг пайдо бўлиши табиий ресурсларга бой бўлган чекка ҳудудларни ривожлантириш учун қулайроқ бўлиши мумкин. Алоқа технологияларининг ривожланиши аҳоли зичлиги паст ҳудудларда табиий ресурслардан фойдаланган ҳолда янги иш ўринларини яратиш имконини беради. Бугунги кунда, глобаллашув халқаро рақобатнинг кучайишига олиб келмоқда ва компанияларни ўз ишлаб чиқаришларини жойлаштириш учун янада қулайроқ жойларни излашга мажбур қилмоқда. Бунинг сабаби ишчи кучининг арзонлиги, кўпроқ фойдаланиш мумкин бўлган ресурслар, қулайроқ солиқ иқлими ёки савдо бозорига яқинлик бўлиши мумкин.

Шу билан бирга кўпгина жараёнлар географик омилларга камроқ боғлиқ бўлиб қолди, бу эса компанияларга ишлаб чиқаришни арзонроқ харажат билан узоқроқ ҳудудларда жойлаштириш, технология янада ихчам ва самарали ишлаб чиқариш қувватларини яратиш имконини беради. Истеъмол талабининг ўзгариши ишлаб чиқаришнинг фазовий тақсимланишига ҳам таъсир қилади. Масалан, айрим товарларга бўлган талабнинг ортиши савдо бозорига яқин жойлашган янги ишлаб чиқариш қувватларининг пайдо бўлишига олиб келиши мумкин. Транспорт-коммуникация инфратузилмасининг такомиллашуви товарлар ва ахборотлар ҳаракатини тезлаштиради ва арзонлаштирди, бу ҳам ишлаб чиқаришнинг фазовий тақсимотидаги ўзгаришларга ёрдам беради. Бу компанияларга ишлаб чиқариш занжирларини оптималлаштириш ва ишлаб чиқаришни узоқроқ ҳудудларда жойлаштириш имконини беради. Компаниялар кўпроқ ўз ишлаб чиқаришларини қаерда жойлаштиришни танлашда атроф-муҳит омилларини ҳисобга олишади. Бу эса ишлаб чиқаришни экологик вазият анча қулай бўлган ҳудудларга кўчиришга ёки экологик тоза технологияларни жорий этишга олиб келиши мумкин.

Баъзан, корхоналарнинг минтақадан чиқиб кетиши маҳаллий бюджетга солиқ тушумларининг камайишига олиб келади. Бу, ўз навбатида, ҳудудий ҳокимият органларининг ижтимоий дастурлар, инфратузилма лойиҳалари ва бошқа муҳим ташаббусларни молиялаштириш имкониятларини чеклайди. Молиявий маблағларнинг етишмаслиги минтақа ривожланишини секинлаштириши ва салбий оқибатларини янада кучайтириши мумкин. Агар янги саноат тармоқлари эскиларининг кетишини қоплаш учун етарлича тез ривожланмаса, инвестициялар етишмаслиги туфайли минтақа инфратузилмаси ёмонлашиши мумкин. Бу транспорт инфратузилмаси, алоқа тармоқлари ва иқтисодий фаолиятни қўллаб-қувватлаш учун зарур бўлган бошқа муҳим объектларни ҳам ўз ичига олиши мумкин.

Салбий оқибатларни минималлаштириш учун ушбу омилларнинг барчасини ҳисобга олган ҳолда стратегияларни ишлаб чиқиш керак. Бунга қуйидагилар киради:

- ✓ бир тармоққа қарамликни камайтириш учун бир нечта саноатни ривожлантириш;
- ✓ аҳолини янги ишлаб чиқаришларда ишлашга тайёрлаш ва қайта тайёрлаш яъни инсон капиталига инвестициялар киритиш;
- ✓ инфратузилмани ривожлантириш, транспорт, алоқа ва бошқа инфратузилма объектларига инвестициялар киритиш;
- ✓ ижтимоий қўллаб-қувватлаш, минтақавий иқтисодиётдаги ўзгаришлардан зарар кўрган аҳолига ёрдам бериш;
- ✓ янги саноатни ривожлантиришда атроф-муҳитга таъсирни ҳисобга олиш;

- ✓ янги корхоналарни жалб қилиш учун қулай инвестиция муҳитини яратиш.

Ишлаб чиқарувчи кучларнинг ривожланиши ва минтақанинг табиий ва иқтисодий салоҳиятидан фойдаланиш бир-бири билан чамбарчас боғлиқ жараёнлардир. Ишлаб чиқарувчи кучларнинг ривожланиши табиий ресурслардан фойдаланишни ҳам рағбатлантиради, ҳам ўзгартиради, ҳам иқтисодий ўсишни, ҳам келажак авлодлар учун табиий муҳитни сақлашни таъминлайдиган ривожланишга интилиш муҳим вазифадир.

Хулоса қилиб айтиш мумкинки, ҳудудларда янги саноат тармоқларини ривожлантириш узоқ муддатли жараён бўлиб, пухта режалаштириш, самарали бошқарув ва барча манфаатдор томонларнинг саъй-ҳаракатларини мувофиқлаштиришни талаб қилади. Юқоридаги барча омилларни ҳисобга олган комплекс ёндашувгина янги тармоқларнинг барқарор ва муваффақиятли ривожланишини таъминлаши ва минтақа аҳолиси фаровонлигини ошириши мумкин. Ресурслардан фойдаланиш усулларини ўзгартириш кўплаб омиллар билан бошқариладиган динамик жараёндир. Ушбу омиллар ва тенденцияларни тушуниш самарали иқтисодий сиёсатни ишлаб чиқиш ва барқарор ривожланишга эришиш учун муҳимдир. Ишлаб чиқарувчи кучларнинг ривожланиши табиий ресурслардан фойдаланиш самарадорлигини оширишга олиб келади. Янги технологиялар ресурсларни янада самарали қазиб олиш, ишлаб чиқариш чиқиндиларини камайтириш ва ресурслардан самарали фойдаланиш имконини беради.

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ГЛОБАЛЬНОЕ ИЗМЕНЕНИЕ КЛИМАТА И ЕГО ВЛИЯНИЕ НА ВОДНЫЕ РЕСУРСЫ УЗБЕКИСТАНА

Аннотация: *Глобальное изменение климата стало сегодня одной из самых актуальных проблем человечества. Этот процесс оказывает серьезное влияние не только на природную среду, но и на экономику, сельское хозяйство и общественную жизнь. Узбекистан входит в число стран, сильно затронутых глобальным изменением климата из-за своего географического положения, климатических условий и потребностей в водных ресурсах. Водные ресурсы важны для сельского хозяйства и энергетики Узбекистана, и их состояние меняется под влиянием изменения климата. В данной статье представлена информация о влиянии глобального изменения климата на водные ресурсы Узбекистана, его причинах, последствиях и необходимых мерах по решению данного вопроса.*

Ключевые слова: *глобальное изменение климата, водные ресурсы, экономическое развитие, парниковые газы, природная среда, современные технологии.*

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GLOBAL CLIMATE CHANGE AND ITS IMPACT ON UZBEKISTAN'S WATER RESOURCES

Abstract: *Global climate change has become one of the most urgent issues of humanity today. This process has a serious impact not only on the natural environment, but also on the economy, agriculture and social life. Uzbekistan is one of the countries strongly affected by global climate change due to its geographical location, climatic conditions and water resources needs. Water resources are important for agriculture and energy of Uzbekistan, and their status is changing under the influence of climate change. This article provides information about the impact of global climate change on Uzbekistan's water resources, its causes, consequences, and necessary measures to resolve this issue.*

Key words: *global climate change, water resources, economic development, greenhouse gases, natural environment, modern technologies.*

Изменение климата представляет собой широкомасштабный, быстрый и ускоряющийся процесс. Даже для тех, кто живет на Западе, угроза глобального потепления больше не является проблемой, затрагивающей только отдаленные районы. Люди, живущие практически во всех частях света, ощущают последствия изменения климата на своем теле. Межправительственная группа экспертов сообщает, что Земля нагревается быстрее, чем предполагалось ранее. Средняя глобальная температура выросла на 1,1 градуса. Это означает, что к 2040 году средняя температура повысится на 1,5 градуса. Основными причинами изменения климата является деятельность человека. Парниковые газы, выбрасываемые в таких отраслях, как промышленное производство, транспорт, сельское хозяйство и потребление энергии, накапливаются в атмосфере и приводят к повышению глобальной температуры. В результате этих процессов потребность в воде в сельском хозяйстве увеличивается, что приводит к уменьшению водных ресурсов. Водные ресурсы Узбекистана в основном состоят из рек Амударья и Сырдарья, и их состояние меняется под влиянием изменения климата. На сельское хозяйство приходится большая часть потребления воды в Узбекистане, что важно для экономического развития страны и продовольственной безопасности. Водные ресурсы Узбекистана очень важны для сельского хозяйства страны, энергетики и снабжения питьевой водой. Водные ресурсы в основном состоят из рек, озер и подземных вод. На сельское хозяйство приходится 90% потребления воды в Узбекистане, что важно для экономического развития страны. Однако водные ресурсы ухудшаются в результате глобального изменения климата. С каждым годом увеличивается истощение водных ресурсов и возникновение засух, что снижает производительность в сельском хозяйстве. [1]

Истощение водных ресурсов также негативно влияет на питьевое водоснабжение и санитарию. В Узбекистане изменение климата влияет на водные ресурсы по ряду направлений. В результате повышения температуры потребление воды увеличивается. Увеличение спроса на воду в сельском хозяйстве приводит к истощению водных ресурсов. В Узбекистане потребление воды для выращивания хлопка и других культур очень велико, что приводит к истощению водных ресурсов. Снижение урожайности сельскохозяйственных культур в результате изменения климата угрожает продовольственной безопасности. Сельское хозяйство Узбекистана в основном основано на выращивании водозависимых культур, что является важным фактором обеспечения экономической стабильности страны. [2]

Изменение климата также влияет на качество воды. Промышленные отходы и сельскохозяйственные пестициды, попадающие в водные источники, приводят к загрязнению воды. Загрязнение воды снижает качество питьевой воды и угрожает здоровью населения. Загрязнение воды не только ухудшает качество питьевой воды, но и отрицательно влияет на рост и развитие сельскохозяйственных культур. Проблемы качества воды в Узбекистане создают серьезные препятствия в развитии сельского хозяйства и промышленности. Таяние ледников также является важной проблемой. Ледники, расположенные в горных районах Узбекистана, являются одним из важных источников водных ресурсов. В результате таяния ледников количество воды, поступающей в реки, уменьшается, что оказывает негативное влияние на сельское хозяйство и питьевое водоснабжение. [3]

В результате таяния ледников обостряется проблема сокращения водных ресурсов Узбекистана. Таяние ледников также рассматривается как один из индикаторов изменения климата, и продолжение этого процесса может ухудшить ситуацию с водными ресурсами в будущем. В Узбекистане часто случаются засухи. Засуха связана с истощением водных ресурсов и увеличением спроса на воду в сельском хозяйстве. Во время засухи сельскому хозяйству не хватает воды для орошения посевов, что снижает производительность и ставит под угрозу продовольственную безопасность. Засухи в Узбекистане происходят в основном в результате изменения климата и деятельности человека. В период засухи вопросы сохранения и эффективного использования воды в сельском хозяйстве приобретают актуальное значение. [4]

Правительству Узбекистана необходимо реализовать ряд мер по изменению климата и управлению водными ресурсами. Во-первых, необходимо улучшить систему управления водными ресурсами. Важно внедрять новые технологии для экономии и эффективного использования воды. Модернизация ирригационных систем и использование водосберегающих методов необходимы для эффективного управления водными ресурсами. Необходимо внедрять современные технологии экономии воды и использовать водосберегающие методы в сельском хозяйстве, эффективно управлять водными ресурсами. Чтобы снизить потребность в воде в сельском хозяйстве, необходимо внедрять новые агротехнологии.

Выращивание экологически чистых и водолюбивых культур снижает потребление воды в сельском хозяйстве. Экономия и эффективное использование воды в сельском хозяйстве имеет важное значение для экономического развития страны. Управление водными ресурсами и внедрение эффективных ирригационных систем в сельском хозяйстве является важным фактором развития сельского хозяйства Узбекистана. Необходимо повысить экологическое образование и осведомленность в Узбекистане. Обучение людей вопросам изменения климата и важности водных ресурсов побудит их экономить воду и вести экологически чистый образ жизни. Экологическое образование важно для информирования молодого поколения об изменении климата и защите водных ресурсов. Повышение ответственности населения за охрану водных ресурсов имеет важное значение для экономии воды и защиты окружающей среды. [5]

Эксперты отмечают, что основным фактором изменения климата является парниковый эффект. Накопление солнечного тепла на поверхности Земли и его конденсация называется парниковым эффектом. Другими словами, Земля, в свою очередь, возвращает свет Солнца в космос через атмосферу. Некоторые из этих лучей поглощаются различными газами, испускаемыми людьми, вместо того, чтобы уйти в космос. В результате невозврата в космос поверхность Земли нагревается сильнее обычного и образуется парниковый слой, что влияет на климат.В результате разница между самой высокой и самой низкой температурой в течение дня невелика. То есть на людей и природу воздействует горячий и влажный воздух как ночью, так и днем. Такая ежедневная жара вызывает внезапное потепление. Основным газом, создающим парниковый эффект, является углекислый газ. Его добавляют в атмосферу как естественным, так и искусственным путем. Метан, оксиды азота и другие вредные газы выбрасываются в воздух из-за человеческого фактора, который и определяет уровень всего парникового эффекта. Увеличение концентрации газов, создающих парниковый эффект, нарушает естественный тепловой баланс на планете и вызывает антропогенный парниковый эффект. По оценкам, к 2100 году из-за парникового эффекта мировой валовой внутренний продукт может сократиться более чем на 20 процентов. Также в качестве основных проблем сегодня можно назвать воздействие антропогенных факторов и резкое сокращение поглощающих углекислый газ лесных площадей, истощение озонового слоя, сокращение площадей дикой природы. [6]

Заключения:

Глобальное изменение климата оказывает серьезное воздействие на водные ресурсы Узбекистана. Такие проблемы, как истощение водных ресурсов, снижение продуктивности сельского хозяйства и ухудшение качества воды, угрожают экономическому развитию Узбекистана. Поэтому правительству и обществу необходимо совместно осуществлять эффективные меры по изменению климата и управлению водными ресурсами. Сохранение водных ресурсов Узбекистана и их эффективное управление важны для будущего страны. Борьба с изменением климата и охрана водных ресурсов – важная задача не только Узбекистана, но и всего человечества.

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ЭТИКА И КАДРОВАЯ ПОЛИТИКА: КАК СОБЛЮДЕНИЕ ЭТИЧЕСКИХ НОРМ ВЛИЯЕТ НА ЭФФЕКТИВНОСТЬ РАБОТЫ МУНИЦИПАЛЬНЫХ СЛУЖАЩИХ В ГОРОДЕ УФЕ РЕСПУБЛИКИ БАШКОРТОСТАН

Аннотация: *В данной статье рассматривается взаимосвязь между соблюдением этических норм и эффективностью работы муниципальных служащих в городском округе Уфа. В условиях современных вызовов, таких как коррупция, низкий уровень доверия к государственным институтам и необходимость повышения качества предоставляемых услуг населению, этика становится важным аспектом кадровой политики. Исследуются основные этические принципы, влияющие на работу муниципальных служащих, а также анализируются существующие практики и инициативы, направленные на улучшение этической среды в органах местного самоуправления. Рассматриваются примеры успешного применения этических кодексов и обучения по вопросам этики, а также представлены рекомендации по повышению уровня этики в кадровой политике муниципальных образований. Работа направлена на выявление значимости этических норм для повышения эффективности и качества работы муниципальных служащих, что, в свою очередь, должно способствовать укреплению доверия граждан к государственным институтам и улучшению качества предоставляемых услуг.*

Ключевые слова: *этика, кадровая политика, муниципальные служащие, эффективность, Уфа, местное самоуправление, коррупция, доверие, этические нормы, профессиональная этика, государственные учреждения, обучение, этические кодексы, управление персоналом, ответственность, профессионализм.*

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ETHICS AND HR POLICY: HOW DOES COMPLIANCE WITH ETHICAL STANDARDS AFFECT THE EFFICIENCY OF MUNICIPAL EMPLOYEES IN THE CITY OF UFA, REPUBLIC OF BASHKORTOSTAN

Abstract: This article examines the relationship between ethical standards and the performance of municipal employees in the urban district of Ufa. In the context of modern challenges such as corruption, low trust in government institutions and the need to improve the quality of services provided to the population, ethics is becoming an important aspect of personnel policy. The main ethical principles that affect the work of municipal employees are examined, and existing practices and initiatives aimed at improving the ethical environment in local governments are analyzed. Examples of the successful application of ethical codes and ethics training are considered, and recommendations for improving the level of ethics in the personnel policy of municipalities are presented. The work is aimed at identifying the importance of ethical standards for improving the efficiency and quality of work of municipal employees, which, in turn, should help strengthen citizens' trust in government institutions and improve the quality of services provided.

Key words: ethics, personnel policy, municipal employees, efficiency, Ufa, local government, corruption, trust, ethical standards, professional ethics, government agencies, training, ethical codes, personnel management, responsibility, professionalism.

Современные реалии требуют от государственных служащих не только высокой квалификации и профессионализма, но и соблюдения строгих этических норм. Этика в кадровой политике муниципальных органов власти играет ключевую роль в формировании эффективной системы управления. В условиях, когда общество сталкивается с проблемами коррупции, недостатка доверия к власти и низкого качества предоставляемых услуг, соблюдение этических стандартов становится неотъемлемой частью работы муниципальных служащих.

Этика является не только теоретическим понятием, но и практическим инструментом, который может значительно повысить качество управления и уровень обслуживания населения. В данной статье мы проанализируем, как этические нормы влияют на эффективность работы служащих в Уфе, а также предложим пути улучшения этической среды в органах местного самоуправления.

Этика — это система моральных норм и принципов, которые регулируют поведение человека в обществе. В контексте кадровой политики этика становится основой для формирования корпоративной культуры, где важны не только профессиональные качества, но и моральные ориентиры. Этические нормы способствуют созданию доверительных отношений как внутри коллектива, так и между служащими и гражданами, что, в свою очередь, влияет на общую эффективность работы. Основные этические принципы, такие как честность, справедливость, ответственность и уважение, должны быть внедрены в практику муниципального управления. Эти принципы не только подчеркивают важность морального поведения, но и помогают формировать позитивный имидж муниципальных органов власти в глазах общества.

Честность является основополагающим принципом, который предполагает открытость и прозрачность в действиях муниципальных служащих. Честное поведение создает атмосферу доверия и способствует более эффективному взаимодействию с гражданами.

Справедливость подразумевает равное отношение ко всем гражданам, независимо от их социального статуса, расы или других факторов. Служащие, действующие справедливо, способствуют формированию положительного имиджа органов власти и повышают уровень удовлетворенности населения.

Ответственность — это обязательство выполнять свои обязанности и нести последствия за свои действия. Муниципальные служащие должны осознавать, что их решения и действия влияют на жизнь граждан, что требует от них высокой степени ответственности.

Многие муниципальные образования разрабатывают и внедряют этические кодексы, которые служат основой для оценки поведения служащих. Эти кодексы должны быть не только формальными документами, но и инструментами, способствующими развитию этической культуры в организации. Важно, чтобы они были доступны, понятны и актуализировались в зависимости от изменений в обществе и законодательстве.

Ниже рассмотрим влияние этики на эффективность работы муниципальных служащих в Уфе.

Коррупция представляет собой одну из главных угроз для эффективности работы органов местного самоуправления. Она подрывает доверие граждан к государственным учреждениям, приводит к снижению качества услуг и создает негативный имидж для всей системы управления. В Уфе, как и в других городах, необходимо внедрять меры по борьбе с коррупцией, включая формирование этической среды, способствующей прозрачности и открытости.

Коррупция может возникать по различным причинам, включая недостаток контроля, отсутствие прозрачности в процессах принятия решений и низкий уровень заработной платы муниципальных служащих. Эти факторы могут создавать условия, способствующие коррупционным проявлениям.

Последствия коррупции могут быть катастрофическими, включая неэффективное использование бюджетных средств, ухудшение качества жизни граждан и разрушение доверия к государственным институтам. Для борьбы с этими явлениями необходимо внедрение этических норм и стандартов, которые помогут предотвратить коррупционные практики.

Примеры успешных практик:

В Уфе реализуются инициативы, направленные на повышение уровня этики среди муниципальных служащих. Например, программы по обучению этическим стандартам, проведение семинаров и тренингов, направленных на развитие навыков этичного поведения.

Обучение муниципальных служащих по вопросам этики и антикоррупционной деятельности может значительно повысить уровень их осведомленности и готовности к соблюдению этических норм. Важно, чтобы такие программы были регулярными и охватывали все уровни муниципального управления.

Создание системы анонимных жалоб и обратной связи позволяет гражданам сообщать о нарушениях этики, что способствует повышению уровня ответственности среди служащих. Такие механизмы помогают выявлять проблемы на ранней стадии и устранять их.

Соблюдение этических норм в работе муниципальных служащих положительно сказывается на их производительности и качестве предоставляемых услуг. Исследования показывают, что служащие, работающие в условиях высоких этических стандартов, более мотивированы, имеют высокий уровень доверия со стороны граждан и более эффективно выполняют свои обязанности.

Для оценки эффективности внедрения этических норм можно использовать различные показатели, такие как уровень удовлетворенности граждан, количество жалоб на коррупцию и нарушения этики, а также результаты опросов среди служащих.

На основании вышеизложенного в данной статье, были разработаны рекомендации, направленные на повышение уровня этических стандартов в кадровой политике.

1. **Разработка и внедрение этического кодекса** для муниципальных служащих, который должен быть четко прописан и доступен для всех работников.
2. **Регулярное обучение и повышение квалификации** работников по вопросам этики, включая семинары, тренинги и воркшопы.
3. **Создание системы мониторинга и оценки соблюдения этических норм,** включая анонимные опросы и регулярные отчеты о результатах.
4. **Разработка программ поощрения** для тех, кто демонстрирует высокие этические стандарты в своей работе, что может включать как материальные, так и моральные поощрения.
5. **Установление открытых каналов связи** между гражданами и муниципальными служащими, чтобы жители могли сообщать о нарушениях и получать обратную связь.
6. **Проведение регулярных исследований** по вопросам этики и коррупции, чтобы выявлять проблемные области и разрабатывать стратегии их решения.

Подводя итоги, можно констатировать, что соблюдение этических норм представляет собой ключевой аспект кадровой политики, который напрямую влияет на эффективность работы муниципальных служащих в Уфе. Внедрение этических стандартов в практику управления позволит повысить уровень доверия граждан к органам власти, улучшить качество предоставляемых услуг и создать более здоровую рабочую атмосферу в муниципальных учреждениях. Этическая культура должна стать неотъемлемой частью кадровой политики, что в свою очередь поможет создать более эффективное и устойчивое муниципальное управление.

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ОСОБЕННОСТИ СОВРЕМЕННОЙ НАЛОГОВОЙ СИСТЕМЫ РОССИИ

Аннотация. *Статья посвящена становлению и развитию налоговой системы Российской Федерации, а также вопросы определения налога и подходы к его пониманию.*
Ключевые слова: *Налог, налоговая система, бюджетная система, налогообложение, федеральные налоги.*

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FEATURES OF THE MODERN RUSSIAN TAX SYSTEM

Annotation. *The article is devoted to the formation and development of the tax system of the Russian Federation, as well as issues of tax definition and approaches to its understanding.*
Keywords: *Tax, tax system, budget system, taxation, federal taxes.*

Роль налогов в жизни государства трудно переоценить. Налоги - это средства, с помощью которых существует институт государства. Налоги поддерживают государственный аппарат, законодательные и регулирующие органы, образование и здравоохранение, обеспечивают обороноспособность страны. Они позволяют увеличить масштабы производства, расширить специализацию и экономическое содержание внутреннего рынка страны, получить дополнительные доходы за счет создания новых производств за счет инвестиций из государственного бюджета, а также повысить уровень жизни граждан страны. Для выполнения этих задач создается Государственная налоговая система.

Каждая страна строит свою налоговую систему, но есть возможность применять налоговые схемы, разработанные в других странах. В то же время слепое копирование чужих систем, даже если они эффективны для других, не может быть гарантией построения гармоничной налоговой системы в стране. При этом необходимо учитывать специфику исторического и социального развития страны, менталитет населения, политическую и экономическую ситуацию в стране. Только хорошо продуманная налоговая система может обеспечить эффективное функционирование национальной экономики и государства в целом. Недостатки налоговой системы приводят к несоответствию между изменениями, происходящими в обществе и государстве. В конечном итоге неэффективно функционирующая налоговая система становится помехой экономическому и социальному развитию государства и его территориальных образований, вызывает общее недовольство налогоплательщиков.

Известно, что значение налогов для государства трудно переоценить. Налоги - это средства, с помощью которых существует институт государства. Каждая социально-экономическая формация характеризуется собственной системой государственных доходов, которая определяется уровнем развития товарно-денежных отношений, способом производства, характером и функциями государства.

Одним из важнейших условий стабилизации финансовой системы любого государства, в том числе и Российского, является обеспечение устойчивого сбора налогов, продуманной налоговой политики, стабильной и функционирующей налоговой системы. Потребность в налогах возникает из функций и задач государства (политических, экономических, социальных), Для осуществления которых необходим доход.

Современные государственные бюджетные системы включают в себя бюджеты центрального правительства, региональных органов власти и органов местного самоуправления. Известно, что налоговые поступления составляют значительную доходную часть бюджета страны. Отношения между налогами и бюджетом носят двусторонний и неразрывный характер.

Налоги как основной элемент доходов бюджета обеспечивают финансирование всей структуры его расходных статей. В бюджетном процессе приоритет отдается расходам, размер которых определяет доходную часть. Основным недостатком бюджетной сбалансированности является раздельное формирование доходной и расходной частей бюджета без необходимого экономического обоснования (постатейного соотношения) между отдельными расходами и возможности обеспечить соответствующий объем доходов по ним.

Согласно статье 10 Бюджетного кодекса, бюджетная система Российской Федерации состоит из следующих уровней бюджетов:

- Федеральный бюджет и бюджеты государственных внебюджетных фондов;

- бюджеты субъектов Российской Федерации и бюджеты территориальных государственных внебюджетных фондов;

- местные бюджеты, в том числе: бюджеты муниципальных районов, бюджеты городских округов, бюджеты внутригородских муниципальных образований городов федерального значения Москвы и Санкт-Петербурга; бюджеты городских и сельских поселений.

Бюджет субъекта Российской Федерации и свод бюджетов муниципальных образований, входящих в состав субъекта Российской Федерации, образуют Консолидированный бюджет субъекта Российской Федерации.

Федеральный бюджет и совокупность бюджетов других уровней бюджетной системы Российской Федерации также образуют Консолидированный бюджет Российской Федерации.

В соответствии со статьей 6 Бюджетного кодекса Российской Федерации консолидированный бюджет представляет собой совокупность бюджетов всех уровней, в которую входят Федеральный, региональный и местный бюджеты. Роль консолидированных показателей важна при анализе формирования и использования централизованного финансового фонда страны. Консолидированное финансовое планирование невозможно без расчета показателей консолидированных бюджетов. Показатели консолидированного финансового баланса государства и территориальных консолидированных финансовых балансов берутся из консолидированных бюджетов.

Совокупность федеральных налогов образует первый уровень налоговой системы Российской Федерации. Федеральные налоги и сборы-это налоги и сборы, установленные НК РФ и обязательные к уплате на всей территории Российской Федерации, если они не заменены специальными налоговыми режимами в порядке, установленном НК РФ.

Федеральные налоги составляют основу российской налоговой системы:

Во-первых, они обеспечивают наибольшие поступления в бюджетную систему, то есть несут основную фискальную нагрузку. Основные федеральные налоги, к которым относятся налог на добычу полезных ископаемых, налог на доходы физических лиц, налог на прибыль и налог на добавленную стоимость, в 2017 году обеспечили 71% всех налоговых поступлений консолидированного бюджета Российской Федерации;

Во-вторых, федеральные налоги играют регулирующую роль в процессе перераспределения ресурсов между регионами и территориями. Федеральные налоги распределяются по всей бюджетной системе и служат основными источниками доходов региональных и местных бюджетов. Стоит отметить, что федеральные налоговые поступления растут с каждым годом.

Россия является федеративным государством и имеет сложное административно-территориальное деление в пределах субъектов Федерации. В соответствии с этим была сформирована структура налоговой системы, которая является трехуровневой. Наряду с федеральными налогами налоговая система состоит из региональных и местных налогов.

Налоговый кодекс Российской Федерации устанавливает закрытый перечень региональных и местных налогов. Налоги субъектов Федерации устанавливаются и вводятся на основании Налогового кодекса и законов субъектов Российской Федерации и обязательны к применению на территориях соответствующих субъектов Российской Федерации. Субъекты Российской Федерации в пределах, установленных Налоговым кодексом Российской Федерации, определяют налоговые ставки, порядок и сроки их уплаты, а также могут предоставлять льготы по этим налогам для отдельных категорий налогоплательщиков. Наряду с Федеральным подоходным налогом источником доходов региональных бюджетов должны служить региональные налоги, основным из которых является налог на имущество организаций.

Поскольку объектом налогообложения здесь является не доход, а имущество, то этот источник имеет относительную стабильность. Транспортный налог также обладает значительным фискальным потенциалом. Учитывая непрерывный рост количества транспортных средств, поступления по этому налогу должны иметь тенденцию к увеличению.

Необходимо, чтобы совокупность региональных налогов, сформированная в ходе налоговой реформы, вместе с региональной частью налога на прибыль должна удовлетворять финансовые потребности регионов и давать региональным властям эффективные инструменты воздействия на хозяйствующие субъекты регионов.

Местные налоги - это налоги, установленные Налоговым кодексом Российской Федерации и вводимые в действие нормативными правовыми актами представительных органов местного самоуправления и обязательные к уплате на территориях соответствующих муниципальных образований.

До введения единой налоговой системы В Российской Федерации существовало разделение региональных и местных налогов на обязательные и не обязательные. Следствием такого разделения стало то, что из установленных 23 видов местных налогов 20 не были обязательными и не применялись. Это привело к разделению и несогласованности налоговой системы, разрушению единых принципов налоговой системы.

Таким образом, введение в Налоговый кодекс положения, устанавливающего закрытый круг региональных и местных налогов, было основополагающим и необходимым для бесперебойного функционирования системы.

Таким образом, российская налоговая система прошла сложный путь трансформации и развития. В настоящее время налоговая система Российской Федерации по своей структуре, принципам и методам функционирования отвечает основным требованиям рыночной экономической системы. В то же время система установленных и эффективных налогов в Российской Федерации отражает особенности национальной экономики.

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О ВОЕННО-ПОЛИТИЧЕСКИХ ИТОГАХ ПОЛКОВОДЧЕСКОЙ ДЕЯТЕЛЬНОСТИ АМИРА ТЕМУРА

Аннотация: *в статье рассматриваются основные походы Амира Темура, его вклад в развитие мирового военного искусства, управление государством, его развитие.*

Ключевые слова: *стратегия, тактика, сражение, битва, полководец, войска, боевой порядок, организационная структура войск, вооружение, политические миссии, безопасность.*

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ON THE MILITARY AND POLITICAL RESULTS OF AMIR TEMUR'S MILITARY LEADERSHIP

Abstract*: the article examines the main campaigns of Amir Timur, his contribution to the development of world military art, government, and its development.*

Keywords: *strategy, tactics, battle, battle, commander, troops, order of battle, organizational structure of troops, armament, political missions, security.*

Один из самых выдающихся периодов истории государственности Узбекистана связан с именем и выдающимися преобразованиями великого предка узбекского народа Амира Темура (1336-1405). Как известно, в мировой истории период его правления занимает особое место.

Преклоняясь перед гением Амира Темура, мы отдаем должное его военному искусству, военной стратегии и тактике. Военная доблесть принесла ему славу великого полководца. Его сражения изучаются во многих военных академиях иностранных государств. Амир Темур оставил и теоретическое наследство - правила управления государством и ведения войны, которые он изложил в форме *Уложения (Тузукат)*.

В статье рассмотрены два аспекта деятельности Амира Темура, как ***полководца*** *и* ***политика***, определивших большое влияние на развитие военного искусства и формирование политической обстановки на ***Евразийском континенте*** в конце XIV – начале XV вв.

В области военного строительства Амир Темур значительно превзошел своих современников - полководцев других стран, разработал и осуществил систему создания и совершенствования армии.

Амир Темур лично подбирал и воспитывал своих полководцев. Верное назначение десятников (*ўн беги*), сотников (*юз беги*), тысячников (*минг беги*), темников (*туман беги*) во многом определяло боевой успех армии.

Войска делились на десятки (*ўн*), сотни (*юз*), тысячи (*минг*) и десятки тысяч (*туман*) человек. Особое внимание Сохибкиран уделял подбору талантливых военачальников.

Главным элементом войска Амира Темура были кочевники, которые поставляли всадников и стрелков. Оседлое население поставляло пехоту и воинов для подсобных и осадных работ: для пуска катапульт, вбивания таранов, пускания огненных стрел и метания гранат с зажигательной смесью из нефти.

В войске Амира Темура имелась легкая пехота, которая в походах следовала на лошадях, а для ведения боя спешивалась, чтобы увеличить меткость стрельбы. Пехотинец имел меч, лук и до 30 стрел. Легкая пехота применялась для действий на пересеченной местности и при осадах. Кроме того, Амир Темур организовал *специальную пехоту для действий в горах (горную пехоту).*

Армия Амира Темура имела стройную организацию и определенный порядок построения. В его армии нашли свое наиболее полное завершение ***организация, стратегия и тактика ведения сражений.***

Каждый воин должен был знать свое место в десятке, десяток - в сотне, сотня - в тысяче и тысяча - в тумане. Войска умели передвигаться в строю и различались по цвету снаряжения, одежды и знамен.

Боевой порядок рассредоточивался по фронту и особенно в глубину. За счет ослабления центра усиливались фланги, которые являлись средством окружения противника. Для решительного удара Амир Темур создавал *сильные резервы.*

Во время крупных сражений *командный пункт* главнокомандующего – шатер (*баргох, саропарда*) Амира Темура устанавливался на возвышенной местности, откуда можно было легко управлять боем. Обычно возле шатра главнокомандующего располагался военный оркестр, который, непрерывно играл боевые марши, поднимая боевой дух солдат.

Враг, отступивший и укрывшийся в крепости осаждался. Перед толстыми стенами крепостей устанавливались стенобитные (*манжаник*) и камнеметательные (*аррода*) орудия. Приводились в действие пушки (*раъд*).

Под стенами и башнями сооружались подкопы. Делались бреши. Через пробоины в стене воины стремительно шли во внутрь крепости. Во время штурма использовались защитные щиты (*тура*), лестницы (*шоту*), петли (*команд*), канаты.

В армии Темура существовал также прообраз *инженерных частей*, куда входили катапульты, приспособления для метания горючей смеси и для подрыва стен крепостей. В его войсках использовалась вся современная техника того времени – осадная техника: *тараны, катапульты (манжаник) и баллисты* для метания камней и горшков с горящей нефтью. Кроме того, имелись специалисты - *понтонеры* для наведения мостов через реки.

Для достижения основных военно-стратегических целей Амир Темур *вводил необходимые изменения в построении боевого порядка и тактике действий своих войск.*

Так, поход 1391 года против хана Золотой Орды Тохтамыша перед решающим сражением на берегу реки Кундузча характеризуется *длительным переходом 200 тыс. армии А.Темура маршем*. Войскам предстояло пройти по степям ***2500 км,*** что является исключительным примером в всемирной военной истории. Сахибкиран тщательно оценил обстановку и выбрал такой маршрут движения, который ***обезопасил его войска во время перехода от врага и одновременно войска оставались незамеченными до встречи с противником***. Войска А.Темура выдвигались по труднодоступным и безводным территориям через степные районы современного Казахстана.

Далее, в битве при Кундузча в 1391 г. он впервые построил боевой порядок в семь *кулов* (*корпусов*).

Боевой порядок войск Амира Темура в этой битве подробно описан в произведениях Низомиддина Шомий и Шарафиддина Али Йазди. Али Йазди об этом пишет так: «Сохибкиран ходил сам и упорядочил войско в семь кулов. Никакой царь так не строил свое войско и об этом я не слыхал».

Для окончательного и решительного достижения поставленных стратегических целей походов против Золотоордынского хана Тохтамыша, в *апреле 1395 года* в битве при реке Терек А.Темур нанёс ему окончательное поражение, после которого Золотая Орда уже никогда не смогла восстановить свою мощь.

Дальнейшим развитием военного искусства в походах Амира Темура явилось разгром Османской империи во главе с Султаном Боязитом в битве при Анкаре в *июле 1402 года.*

Говоря о военном искусстве Амира Темура, здесь нельзя не подчеркнуть, что его стратегия и тактика ***носила решительный характер***. Стратегическую основу походов и сражений ***составляли активные наступательные действия, умелое использование кавалерийской массы и пехоты, быстрый переход от обороны к наступательным действиям, а также основанные на глубоких знаниях формы и способы ведения войны***.

Подводя итоги деятельности Амира Темура, как ***великого военачальника и полководца*** можно сказать, что он создал сильную армию, имеющую большие отличия от армий азиатских государств, которая имела свои особенности.

1. Основу войск А.Темура составляло оседлое население. Вместе с тем на военную службу призывались также скотоводы, ремесленники и другие категории населения.

2. Наряду с конницей, составлявшей основу армии, большую роль играла и пехота.

3. Амир Темур одним из первых на Востоке ввел в свою армию артиллерийское орудие (*раъд*). Появление нового вида оружия способствовало созданию артиллерийских подразделений. Число пушкарей (*раъдандоз*) достигало нескольких тысяч человек. Артиллерийские орудия предназначались для поражения живой силы, а также для осады крепостей, цитаделей и устанавливались в наиболее ответственных участках линий осады.

4. Сахибкиран создал специальные пехотные войсковые части, которые умело действовали в горной местности (*прообраз современных горных стрелков*). В состав армии А.Темура входили также инженерные части – подразделения, оснащенные стенобитными орудиями и приспособлениями для метания горючей смеси, а также для подрыва стен крепостей. Для наведения мостов через реки применялись *специалисты - понтонеры*.

5. Амир Темур умело строил боевые порядки своего войска и осуществлял маневр ими, мастерски применял фланговые удары и удары в тыл противника конницей, в зависимости от обстановки делил свое войско на девять и семь частей (*кулов*).

6. В военном искусстве Сахибкирана важное место занимала тактика быстрых маневров. Он был мастером марша и маневров, которые не раз спасали его от поражения и не раз приносили победу. У него была необычная способность быть в нужном месте в нужное время в ходе сражения. Это позволяло ему принимать правильные решения и своевременно влиять на ход сражения.

7. Вместе с тем важнейшим условием успеха в войне, в осуществлении стратегических и оперативно-тактических планов великий полководец считал строжайшую централизацию руководства армией, суть которой состояла в том, чтобы все войска были подчинены единому командованию. Все эмиры были подчинены главнокомандующему и строго выполняли свои обязанности. «Всем начальникам - писал Темур в «Уложении», - я предлагал исполнять мои приказания с самой строгой точностью. Начальник или простой воин, дерзнувший уклоняться или нарушить мои указания, подвергался строгому наказанию».

8. Важным составляющим элементом, в необходимых случаях, было формирование частей из женщин, которые наряду с воинами показывали образцы мужества и доблести.

Рассматривая деятельность Амира Темура, как выдающегося ***политика*** своего времени нельзя не отметить, что он бесспорно был гениальным военачальником своего времени, ***сочетавшим в себе мудрость государственного деятеля.***

Главной целью военных походов Темура была задача - *обезопасить свою страну и народ от внешних врагов и обеспечить народу спокойную жизнь*. Его победоносные походы привели к образованию огромной империи, где была обеспечена строгая централизованная система управления, безопасность торговых путей и спокойствие народа.

Обширные территории на востоке от Центральной Азии и до Эгейского моря на западе были подчинены Амиру Темуру. Две огромные империи востока – турецкая и египетская, покорились великому полководцу.

Амир Темур, как ***прогрессивный политик*** прекратил феодальную междоусобицу, кровопролитную борьбу за власть, создал самое могущественное централизованное государство под своим управлением.

Историческое величие Амира Темура состоит в том, что он выполнил возложенные на него самой историей три эпохальные миссии:

первая миссия - объединение территорий Центральной Азии в единое централизованное государство;

вторая миссия заключается в разгроме Сахибкираном Золотой Орды, после чего она уже никогда не смогла восстановить свою былую мощь. Это в свою очередь способствовало ослаблению ее власти над русскими княжествами и ***окончательно освободило*** их от татаро-монгольского ига;

третья миссия Амира Темура связана с победой, одержанной над османским султаном Баязетом в июле 1402 г. в сражении у Анкары. Разгромив державу османов, Амир Темур тем самым способствовал раздроблению ее на мелкие владения.

Для нового объединения этой державы потребовалось долгих 50 лет. Эта полувековая передышка была очень важной для народов Восточной и Центральной Европы. Она *отсрочила на полвека экспансию османов на запад*. И только в 1453 году султан Мехмет II осадил Константинополь, захватил его, дал ему название Стамбул и сделал город своей столицей.

В государстве Амира Темура небывалого расцвета достигли все сферы духовной культуры. В его эпоху наука и литература, архитектура и градостроительство, народные традиции, обряды, праздники, спортивные игры получили такое развитие, что вполне обоснованно стало основой ***Восточного Ренессанса*** и дало мощнейший импульс дальнейшему обогащению мировой культуры. Высокий уровень развития науки и культуры в государстве Амира Темура способствовал созданию и расширению различных центров образования.

Нам ещё предстоит глубже изучить историческое наследие нашего великого предка, глубоко осмыслить его деятельность в строительстве могущественного государства и создании сильной армии.

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ВЛИЯНИЕ АНТРОПОГЕННЫХ ФАКТОРОВ НА КОЛИЧЕСТВЕННЫЕ ИЗМЕНЕНИЯ СТОКА РЕКИ КАРАСУВ В РАЗЛИЧНЫХ ГИДРОЛОГИЧЕСКИХ УСЛОВИЯХ

Аннотация. *В статье представлены результаты количественного анализа изменений в распределении стока реки Карасув по месяцам, фазам водного режима и сезонам в течение года под воздействием антропогенных факторов. Рассмотрено влияние средних многолетних данных о водопотреблении, атмосферных осадках, зарегистрированных на метеостанции, и температуре воздуха на водный режим реки. Особое внимание уделено оценке изменений длины и скорости стока в различных гидрологических условиях, включая многоводные и маловодные годы. Выявлены сезонные колебания стока и их связь с антропогенными воздействиями, что позволяет сделать выводы о тенденциях изменения гидрологического режима реки Карасув.*

Ключевые слова*: гидрологический режим, расход воды, метеостанция, температура воздуха, норма стока, многоводный год, сезонные колебания, маловодный год, антропогенное воздействие.*

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THE IMPACT OF ANTHROPOGENIC FACTORS ON QUANTITATIVE CHANGES IN THE KARASU RIVER'S FLOW UNDER VARIOUS HYDROLOGICAL CONDITIONS

Abstract. *The article presents the results of a quantitative analysis of changes in the monthly, phase, and seasonal distribution of the Karasu River's flow throughout the year under the influence of anthropogenic factors. The study examines the impact of long-term average data on water consumption, atmospheric precipitation recorded at the meteorological station, and air temperature on the river's water regime. Special attention is given to assessing changes in the length and velocity of the flow under various hydrological conditions, including wet and dry years. Seasonal fluctuations in flow and their connection with anthropogenic impacts are identified, allowing conclusions to be drawn about trends in the hydrological regime of the Karasu River.*

Keywords: *hydrological regime, water discharge, meteorological station, air temperature, flow rate, wet year, seasonal fluctuations, dry year, anthropogenic impact.*

Введение. Известно, что при оценке любого водного бассейна необходимо учитывать гидрологические и климатические показатели, наличие населенных пунктов, сельскохозяйственных и промышленных предприятий, а также использование водных ресурсов [12].

В последние годы, в связи с расширением площадей орошаемых земель, освоением новых территорий и улучшением мелиорации сельскохозяйственных угодий, использование и управление водными ресурсами становятся всё более сложными. Развитие ирригации и промышленных предприятий, а также рост численности населения приводят к снижению запасов воды и ухудшению её качества в будущем [14].

Поэтому количественная оценка водных ресурсов, изучение гидрологических аспектов их эффективного использования и поиск конкретных решений имеют значительное научное значение [4].

В условиях растущей конкуренции за доступные водные ресурсы, необходима разработка комплексных стратегий управления, которые учитывают не только текущие потребности, но и долгосрочные прогнозы изменений в климате и экосистемах [15].

Основная часть. Река Карасув расположена в Ташкентской области. Её общая длина составляет 89,3 км, максимальная пропускная способность — 260 м³/с. Она охватывает территорию площадью 152,2 тыс. га, включая Юкори-Чирчикский, Паркентский, Ахангаранский, Урта-Чирчикский, Куйи-Чирчикский и Аккорганский районы. В реку Карасув впадают несколько притоков. Наиболее крупные из них - Кизилсай, Жузуруксай, Паркентсай, Самсараксай.

Рисунок 1. Участок РК 641+14 с Найманским гидроузлом на реке Карасув.

Со второй половины XX века влияние антропогенных факторов на сток рек в бассейне реки Карасув значительно усилилось. В этот период началось активное освоение новых земель, а также строительство крупных гидротехнических сооружений и каналов.

В результате река Карасув стала подчиняться воле человека, что привело к резкому уменьшению стока по всей ее длине. Этот эффект особенно заметен в нижнем течении реки. Снижение влияния возможных негативных последствий требует количественно точной оценки водных ресурсов и их эффективного использования в народном хозяйстве, что является одной из актуальных задач.

Материалы и методы. Первые практические исследования по оценке изменений речного стока по его длине относятся ко второй половине прошлого века [2]. Научную работу в этом направлении вели В.А. Шелутко, В.Е. Чуб, Ю.Н. Иванов, Ф.Е. Рубинова, Н.Л. Фролова, А.В. Сикан, А.Р. Расулов, С.М. Каримов, И.А. Шикломанов и другие ученые. Каждый исследователь изучал эту проблему с определенной стороны и приходил к выводам, соответствующим тематике его исследования.

Учитывая это, основной задачей статьи является оценка изменений величины стока между гидрологическими станциями ПК-9+20, ПК-133+00, Найман, Хантугон и Аккурган на реке Карасув на основе новых гидрометеорологических данных.

Полученные результаты. На основе собранных данных было проведено изучение изменений стока по длине реки Карасув, при этом река была разделена на пять учетных участков. Для каждого выбранного периода были рассчитаны средние расходы воды. По результатам расчетов был построен график изменения стока по длине реки Карасув во времени (рис. 1).

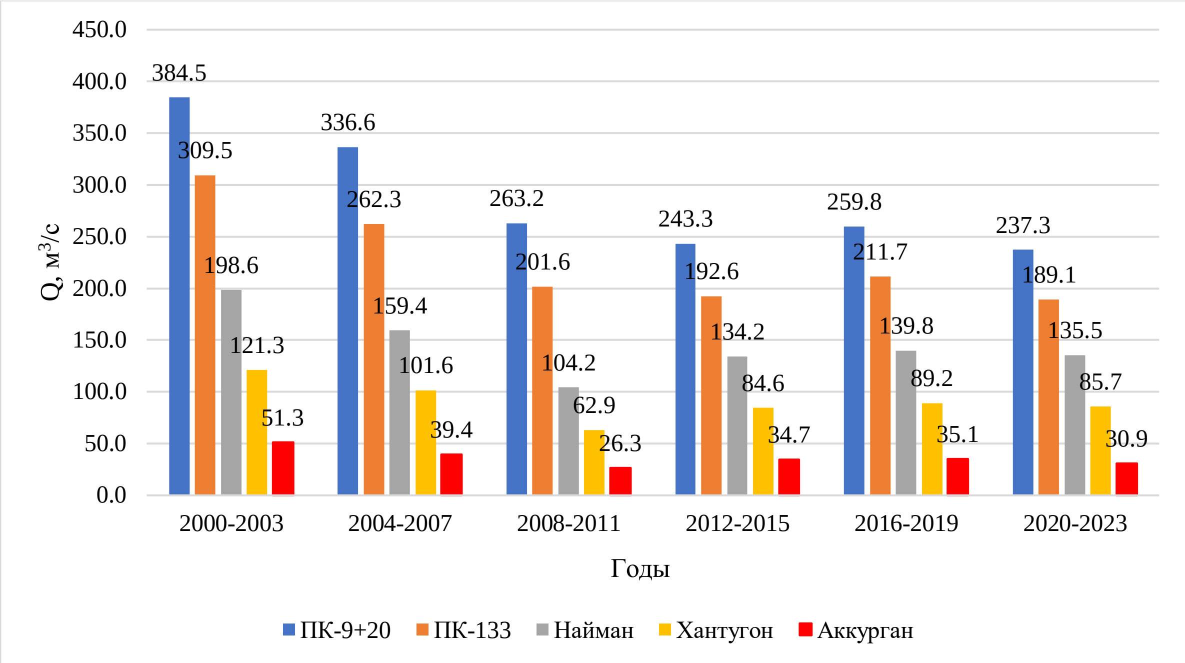

Рисунок 1. Изменение длины реки Карасув и расхода воды с течением времени

Как видно из графика, в 2000–2003 гг. величина стока на гидропосте ПК-9+20 Карасув составляла 384,5 м³/с или 12,1 км³, на ПК-133 — 309,5 м³/с (9,7 км³), на Наймане — 198,6 м³/с (6,2 км³), на Хантугоне — 121,3 м³/с (3,8 км³), и на Аккургане — 51,3 м³/с (1,6 км³). За этот период изменение объема стока между ПК-9+20 и Аккурганом составило 333,2 м³/с (10,5 км³).

Во втором учетном периоде, в 2004–2007 гг., в гидрологическом створе ПК-9+20 объем стока составил 336,6 м³/с (10,6 км³), что ниже показателей первого учетного периода. В створе ПК-133 объем стока снизился до 262,3 м³/с (8,2 км³), а в Наймане он уменьшился на 101,6 м³/с, или на 3,2 км³.

Следующий, а именно шестой отчетный период (2020–2023 годы) значительно отличается от предыдущих. В этот период на реке Карасув последовательно наблюдалась межень в 2020 и 2023 годах.

За этот расчетный период в гидрологическом посте ПК-9+20 объем стока уменьшился на 237,3 м³/с, что составляет 38%, в то время как в Аккургане снижение составило 30,9 м³/с (40%).

Следующие расчеты были сосредоточены на изменении стока между гидрологическими станциями ПК-9+20 и Аккурган, где расход (ΔQ), используемый в этой части реки, является ключевым фактором.

Таблица 1.

Изменение объема стока между гидрологическими станциями ПК-9+20 и Аккурган в период с 2000 по 2023 годы (м³/с, %).

Годы	ПК-9+20	Аккурган	$\Delta Q = Q_{ПК-9+20} - Q_O$	$Q_O/Q_{ПК-9+20}$ *100 %
2003	384,5	51,3	333,2	13,34
2007	336,6	39,4	297,2	11,71
2011	263,2	26,3	236,9	9,99
2015	243,3	34,7	208,6	14,26
2019	259,8	35,1	224,7	13,51
2023	237,3	30,9	206,4	13,02

Анализ данных, представленных в таблице 1, показывает, что в период с 2000 по 2023 год средний сток реки Карасув составлял 13% от общего объема, поступающего с гидрологической станции ПК-9+20 до гидрологической станции Аккурган. Однако, начиная с 2007 года, наблюдаются существенные изменения в динамике стока, что требует более детального анализа.

На основании приведенных выше расчетов можно сделать следующие выводы. В результате значительного антропогенного воздействия объем потребляемой воды между гидрологическими станциями ПК-9+20 Карасув и Аккурган в среднем увеличился.

В последующих расчетах изменения длины реки и временных характеристик стока были разделены на отдельные пятилетние расчетные периоды. В данном случае изменение величины стока вдоль реки Карасув выражалось в процентах относительно показателей гидрологического поста ПК-9+20.

Изменение величины стока во времени было выражено в процентах по сравнению с первым периодом (2000–2004 гг.). Результаты расчетов представлены в таблице 2.

Таблица 2.

Изменение объема стока за пятилетние отчетные периоды

Отчетные периоды	ПК-9+20			Аккурган		
	Q, м^3/с	Изменение величины стока, % да		Q, м^3/с	Изменение величины стока, % да	
		по длине	по времени		по длине	по времени
1999-2003	488,25	100	100	68,15	16,0	100
2004-2008	397,08	100	81,3	61,24	15,4	89,8
2009-2013	321,5	100	65,8	48,32	15,02	70,8
2014-2018	315,16	100	64,5	39,25	12,4	57,5
2019-2023	312,75	100	64,0	33,14	10,5	48,5

На основании данных, представленных в таблице, был построен график процентного изменения разницы в расходе воды между гидрологическими постами ПК-9+20 и Аккурган за пятилетние учетные периоды (рис. 3).

Как видно из табличных данных, среднее изменение величины стока реки Карасув между расчетными периодами по длине реки относительно гидрологического поста ПК-9+20 на гидрологическом посту Аккурган составляет более 60%. В начальный период (1981–1990 гг.) величина стока составляла около 73,2%, в то время как в текущий период она снизилась до 13,8%.

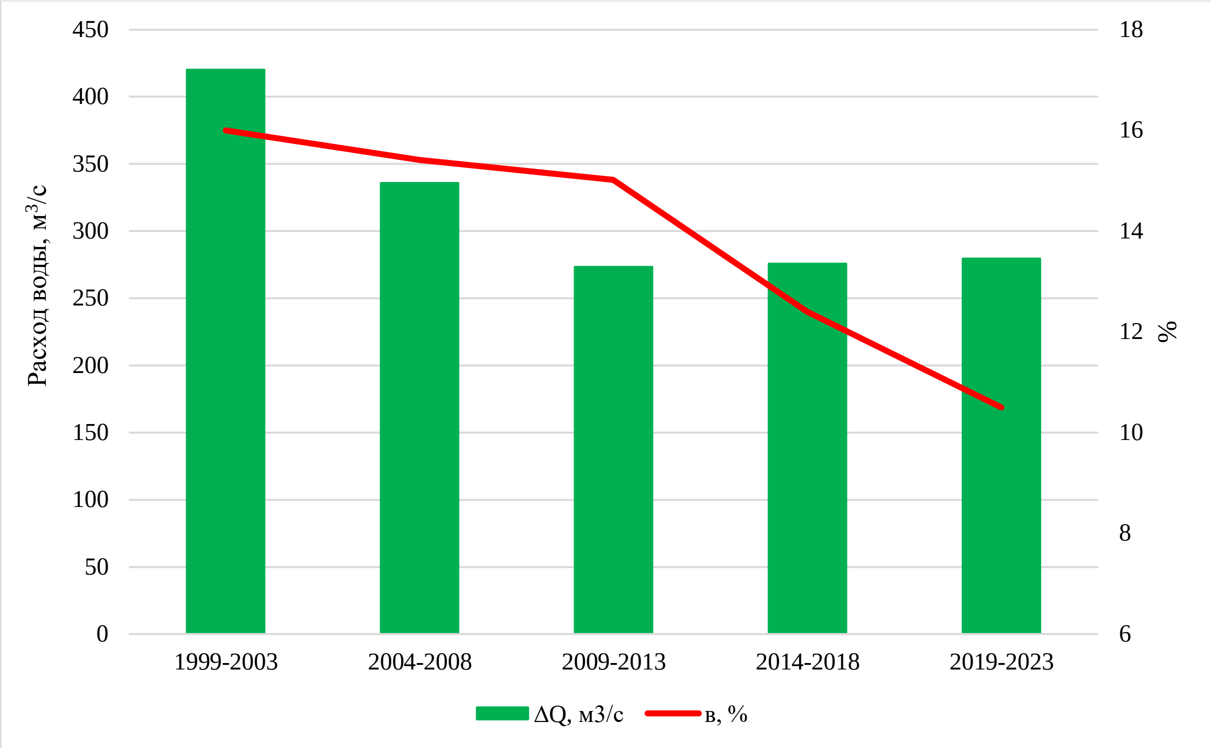

Рисунок 3. График процентного изменения разницы в расходе воды между гидрологическими постами ПК-9+20 и Аккурган за пятилетние отчетные периоды.

В целом, изменение величины стока между гидрологическими постами ПК-9+20 и Аккурган до 1990-х годов находилось в пределах нормы, однако в последующие годы наблюдалось снижение ниже установленной нормы.

Изменение стока реки во времени снизилось в среднем на 29% на гидрологическом посту ПК-9+20 и на 36% на посту Аккурган.

Дискуссия. Результаты исследования показывают значительное влияние антропогенных факторов на сток реки Карасув в период с 2000 по 2023 годы. Основные факторы сокращения стока — рост водопотребления, расширение орошаемых земель, строительство гидротехнических сооружений и изменения климата. С 2000 года сток реки уменьшился на 13%, что указывает на значительные потери воды из-за человеческой деятельности. Наибольшее сокращение стока наблюдается в нижней части реки, что подтверждает необходимость усиленного мониторинга водных ресурсов. Для эффективного управления водными ресурсами требуется продолжение исследований и внедрение методов регулирования водопотребления, а также стратегии устойчивого использования воды с учётом климатических изменений.

Заключение: В проведенных научно-исследовательских работах были учтены изменения стока реки Карасув под воздействием антропогенных факторов. Исследование выявило значительное влияние деятельности человека на гидрологический режим реки. Кроме того, анализ отдаленных данных позволил выявить следующие ключевые изменения:

- Изменения в сезонном распределении стока: Антропогенные факторы, такие как ирригация и управление водными ресурсами, привели к значительным изменениям в сезонном распределении стока реки Карасув. Это отразилось на изменении доли стока, происходящего в разные месяцы и фазы водного режима, что свидетельствует о нарушении естественного гидрологического круговорота воды в реке.
- Влияние водопотребления и климатических условий: Анализ количественных данных показал, что изменения расхода связаны со средним многолетним водопотреблением и климатическими условиями. Повышение температуры воздуха и изменение объема осадков существенно влияют на расход воды в реке, что подчеркивает необходимость учета этих факторов при планировании водопользования.
- Истощение водных ресурсов: Расширение орошаемых площадей и рост промышленного водопотребления привели к уменьшению водных ресурсов реки Карасув. Это подтверждается сокращением длины речного стока и снижением его максимальной пропускной способности, что может усугубить проблемы с водоснабжением в регионе в будущем.

Таким образом, исследование изменения стока реки Карасув под влиянием антропогенных факторов показало необходимость комплексного подхода к управлению водными ресурсами, включая оптимизацию водопользования в условиях изменения климата и принятие мер по защите водных ресурсов.

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СИНТЕЗ НОВОГО ИНГИБИТОРА КАРОЗИЯ НА ОСНОВЕ БИС-МОЧЕВИНЫ

Аннотация: *В настоящее время одним из важнейших вопросов в мире является защита от коррозии металлоконструкций нефтегазо перерабатывающей промышленности. Одним из наиболее эффективных методов защиты от коррозии металлов является применение ингибиторов. В данной работе изучалось получение новых ингибиторов на основе органического синтеза и их ингибирующие свойства.*
Ключевые слова: *бис-мочевины, изоцианатов, бис-мочевины, скорость коррозия, кислых и щелочных средах.*

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SYNTHESIS OF A NEW CORROSION INHIBITOR BASED ON BIS-UREA

Abstract: *Currently, one of the most important issues in the world is the protection of metal structures in the oil and gas processing industry from corrosion. One of the most effective methods of protecting metals from corrosion is the use of inhibitors. In this paper, we studied the production of new inhibitors based on organic synthesis and their inhibitory properties.*
Keywords: *bis-urea, isocyanates, bis-urea, corrosion rate, acidic and alkaline environments.*

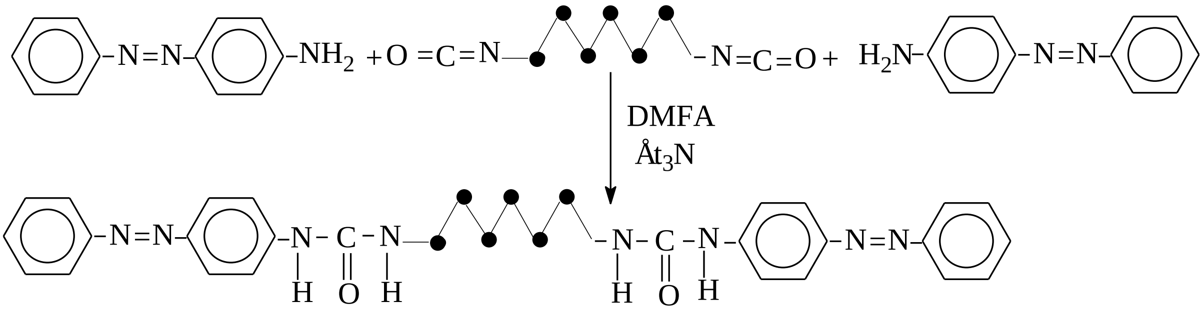
В мире ведутся обширные исследования по синтезу новых производных бис-мочевины, их использованию в различных промышленных технологиях, сельском хозяйстве, медицине, текстильной промышленности и многих других областях. В связи с этим особое внимание уделяется созданию методов синтеза и технологий получения производных бис-мочевины, исследованию их физико-химических свойств и активности, совершенствованию новых ингибиторов, биологически активных биостимуляторов и методов получения на их основе. Реакции изоцианатов с соединениями, содержащими активный атом водорода, все больше привлекают внимание исследователей. Это связано с тем, что среди продуктов данной реакции обнаружены вещества, обладающие различными ценными свойствами [1].

В настоящее время по реакционной способности изоцианатов имеется несколько обзоров [2-3]; однако кинетика и механизм этих реакций до сих пор еще мало изучены.

Моно- и диизоцианаты относятся к числу соединений, обладающих исключительно супервысокой реакционной способностью. Наибольшей реакционной способностью по отношению к изоцианатам обладают первичные и вторичные амины. Петерсон [4] расположил соединения по их реакционной способности в следуюший ряд: амины > вода > спирты > производные мочевины > фенолы > меркаптаны > соединения с активной метиленовой группой.

В ходе наших исследований в результате взаимодействия гексаметилендиизоцианата и аминоазобензола была синтезирована N,N'-гексаметилен-бис-[(1,1'-амино-азобензолил)-мочевина].

Синтез проводили по следующей схеме (это наиболее экономичный метод):



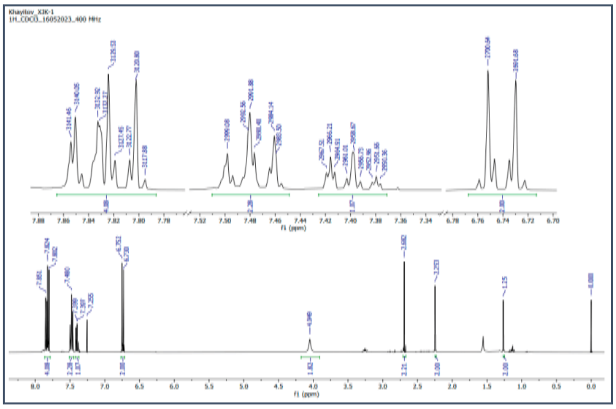
Продукты, синтезированные впервые; (I) N,N'-гексаметилен-бис-[(1,1'-амино-азобензолил)-мочевина] желтого цвета агрегатное состояние кристаллическое. Мало растворим в воде и легко растворим в органических растворителях (ДМАЦ, ДМСО, ДМФА, пиридине, HCOOH, CCl_4 и др.). Физические свойства синтезированных веществ I представлены в таблице 1.

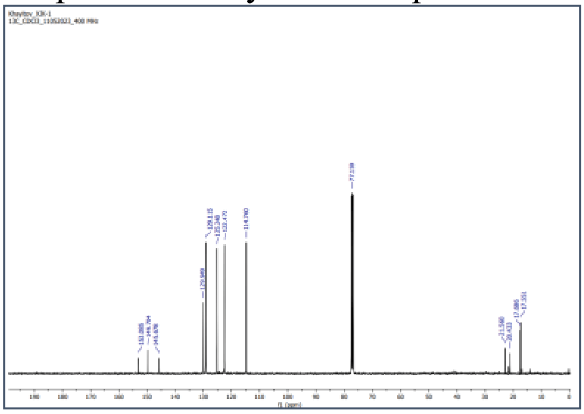
1-таблица

Физико-химические свойства синтезированных соединений

№	Название	Выход продукт	$T_{пл.}$ °C	R_f	Брутто формула	Элемент анализ,	
						Рассчитан	Найден
I	N,N'-гексаметилен-бис-[(1,1'-амино-	92,4	235-255	0,60	$C_{32}H_{34}N_8O_2$	19,14	19,10

Из таблицы видно, что в зависимости от строения бис-(-N=$\overset{\oplus}{C}$=O)группы и распределения электронной плотности как в статистическом, так и в динамическом состоянии молекул диизоцианата, эти факторы часто определяют характер и растворимость диизоцианатных реакций. Спектры ЯМР синтезированных веществ I при 400 МГц в среде $^{1}H\_CDCl_3$, 400 МГц м.д. в среде $^{13}C\_CDCl_3$ получали и анализировали следующим образом.





1-рисунок. ЯМР Спектры ^{1}H и ^{13}C N,N'-гексаметилен-бис [(1,1'-амино-азобензоил)-мочевины

^{1}H - ЯМР N,N'-гексаметилен-бис[(1,1'-амино-азобензоил)-мочевины ($CDCl_3$), 400.1 MHz) NMR: δ 1.25 (4H, t, *J*= 7.0, 6.8 Hz), 2.253 (4H, t, *J*= 7.2, 6.8 Hz,), 2.682 (4H, t, *J*= 8.1, 7.2, Hz), 4.049 (dt, *J*= 2.7, 1.4 Hz), 7.851 (18H dt, *J*= 8.7, 0.5 Hz), 7.824 (d, *J*= 8.7, 2.7, 0.5 Hz), 7.802 (dt, *J*= 8.7, 1.5, 0.5 Hz), 7.48 (t, *J*= 8.7, 1.5, 0.5. Hz), 7.39 (t, *J*= 8.1, 7.7, 1.4, 0.5. Hz), 7.255 (t, *J*= 8.1, 7.7, 1.4, 0.5 Hz), 6.752 (d, *J*= 7.7, 1.3 Hz), 6.730 (d, *J*= 7.7, 1.3 Hz).

^{13}C NMR: δ 17.55-17.68 (2C, 17.5 (s), 17.6 (s)), 29.3-29.4 (2C, 29.4 (s), 29.4 (s)), 40.1-40.1 (2C, 40.1 (s), 40.1 (s)), 116.6-116.7 (4C, 116.6 (s), 116.6 (s)), 122.2-122.3 (4C, 122.2 (s), 122.2 (s)), 124.2-124.3 (4C, 124.2 (s), 124.2 (s)), 127.8-127.8 (2C, 127.8 (s), 127.8 (s)), 128.1-128.3 (4C, 128.2 (s), 128.2 (s)), 134.1-134.3 (2C, 134.2 (s), 134.2 (s)), 149.5-149.6 (2C, 149.5 (s), 149.5 (s)), 153.3-153.4 (2C, 153.3 (s), 153.3 (s)), 154.5-154.7 (2C, 154.6 (s), 154.6 (s)).

Исследовано влияние производных бис-мочевины на концентрацию ингибитора коррозии металлов, pH среды и температуру. При щелочной среде pH=9 уровень защиты в присутствии ингибитора **I** (0,1 масс.%) составляет 92,2 %, а степень защиты в присутствии ингибитора

Экспериментальные испытания проводились гравиметрически в среде с pH от 2 до 11 при температуре 40 ºС. Полученные результаты представлены в таблице ниже. Были проведены исследовательские эксперименты в качестве ингибитора, снижающего скорость коррозии металла.

Воздействие синтезированных ингибиторов на сталь марки Ст.3 проводили в различных pH средах, при разных концентрациях препарата, в течение 24 часов. По результатам испытаний в присутствии изучаемых препаратов (**I**) (N,N'-гексаметилен-бис-[(1,1'-амино-азобензолил)-мочевина]), при повышении pH среды от 2 до 11 скорость коррозии металлов в кислых и щелочных средах, повышение концентрации ингибитора снижало скорость коррозии и повышало уровень защиты (табл. 2).

Полученные результаты показали, что увеличение количества ингибитора в различных средах приводило к снижению коррозии металла в несколько раз, и результаты были внедрены на практике.

2-таблица

Степень коррозии металла и концентрация ингибитора

№	Название ингибитора и массовая доля %	pH среда							
		2		5		9		11	
		СК g/m²s	СЗ %	СК g/m²s	СЗ %	СК g/m²s	СЗ %	СК g/m²s	СЗ %
1	Ingibitorsiz	1.8	-	1.8	-	1.89	-	1.09	-
2	**I** (0,02%)	0.76	58.8	0.63	65,5	0.71	52.9	0.74	47.4
3	**I** (0,05%)	0.48	79.1	0.35	80.8	0.41	85.2	0.46	84.0
4	**I** (0,1%)	0.33	85.7	0.29	89.3	0.30	92.2	0.41	89.0

ЗАКЛЮЧЕНИЕ Синтезированы новые производные бис-мочевины на основе реакций азобензоламина с гексаметилендиизоцианатом и установлено, что их выход с высоким выходом (85-94%) зависит от различных факторов. Изучены эффективные ингибиторные свойства против коррозии металлов среди синтезированных производных бис-мочевины (0,1%-й раствор вещества I снижал СК до 0,33 г/м^{2}с и повышал СЗ до 85,7% в среде с pH 2), доказана его способность заменить импортный ингибитор и применен на практике.

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РОЛЬ МЕТОДА ПЛАСТИЧИКИ РЕЛЬЕФА В ИЗУЧЕНИИ СТРОЕНИЯ РЕЛЬЕФА СОВРЕМЕННОЙ ДЕЛЬТЫ АМУДАРЬИ

Аннотация. *В статье всесторонне анализируются парадигмы физической географии, в том числе геоструктурная парадигма. В этой парадигме роль категории структуры рассматривается с научной точки зрения. Особое внимание уделено древовидному строению малых дельт современной дельты Амударьи. Кроме того, рассмотрены структуры возвышенностей и песчаных массивов современной дельты Амударьи.*

Ключевые слова: *категория, парадигма, элемент, структура, древовидная форма, малая дельта, холмы, песчаный массив, взаимосвязь, взаимосвязь.*

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THE ROLE OF THE RELIEF PLASTICITY METHOD IN STUDYING THE STRUCTURE OF THE RELIEF OF THE MODERN AMUDARYA DELTA

Abstract. *The article comprehensively analyzes the paradigms of physical geography, including the geostructural paradigm. In this paradigm, the role of the category of structure is viewed from a scientific point of view. Particular attention is paid to the tree-like structure of small deltas of the modern Amu Darya delta. In addition, the structures of the uplands and sandy massifs of the modern Amu Darya delta are considered.*

Key words: *category, paradigm, element, structure, tree form, small delta, hills, sand massif, relationship, relationship.*

Структурный анализ дельтовых геосистем становится неотъемлемой частью современных научных знаний. Большую роль в научной значимости этих исследований играет характер структурной категории и доктрины. Иными словами, исходя из востребованности современной науки этой категории и преподавания, без этого понимания невозможно всесторонне исследовать объекты и применять на практике успехи исследований. В энциклопедическом словаре «Философия» понятие структуры определяется следующим образом: «Структура есть структура и внутренняя форма организации системы, эта форма возникает как единство устойчивых взаимодействий между элементами этой системы» (Философия , Энциклопедический словарь, 2004). С этой точки зрения содержание структуры проявляется во взаимосвязи составляющих элементов системы.

Категория элементов также занимает особое место в теории строения. В философском словаре (1976) понятие элемента определяется следующим образом: «Понятие, обозначающее первичные частицы материи, многообразие объектов материального мира, состоящее из различных дополнений и сочетаний этих частиц». Другими словами, бассейны различной площади (бассейны рек, озер, коллекторов и других водоемов) образуются в результате сочетания элементов пластичности рельефа (высот и понижений).

По мнению Б. Рассела: «Структура всегда требует отношений, простой класс (в нашем понимании простые контуры на карточках) не имеет такой структуры». [1]. Короче говоря, каждый объект должен иметь элементы для существования отношений. Отношения элементов друг к другу определяют структуру объектов. И.Н. Степанов всесторонне развивает метод рельефной пластики, примененный В.Р. Волобуевым при исследовании природных мелиоративных объектов Азербайджана, всемерно используя мнение Б. Рассела, и широко применяет его на практике. Взаимодействие элементов земной поверхности (возвышений и понижений), изображенных на рельефных пластиковых картах, составляет структуру объекта [2,4].

Понятие «пластики рельефа» относится к определению внешнего строения и состава земной поверхности в результате тщательного анализа топографических карт и аэрофотоснимков выбранного масштаба [1,4]. Суть метода рельефопластики состоит в систематическом изображении на топографических картах двух основных элементов рельефа местности - относительных высот и понижений. На рельефных пластиковых картах изображены водоразделы, обнажения и понижения, образующие естественный рисунок земной поверхности с сочетанием возвышений и понижений. Альтернативно, только пластиковые карты местности изображают структуру местности, а не типы местности, в отличие от других тематических карт. Другими словами, возвышения и понижения выражаются горизонтальными линиями на топографических картах, которые могут точно отображать любую местность.

Мы говорим о положительной роли крупномасштабной рельефно-пластической карты и приходим к следующему выводу: рельефно-пластические карты, выполненные на основе крупномасштабных топографических карт (1:25000), могут служить комплексной научной основой для исследование реального строения рельефа современной дельты Амударьи. Словом, крупномасштабные рельефные пластиковые карты впервые позволяют выделить 9 малых дельт, то есть крупномасштабные рельефные пластиковые карты являются основой для комплексного изучения «живой» и «автоморфной» частей тока. Дельта Амударьи, выделенная Г.В. Лопатиным. В своих исследованиях, развивая «Учение о пластичности рельефа», заложенное И.Н. Степановым, я пришел к следующему выводу: «Взаимосвязь элементов (возвышений и впадин) в древовидной структуре, созданной в результате деятельности Поверхностный сток вод в условиях дельты и Никто не должен сомневаться в том, что метод рельефной пластики играет неограниченную роль в исследовании взаимосвязи между С этой точки зрения возвышения и понижения, показанные на рельефно-пластической карте, присутствуют во всех регионах, и недаром в качестве основы для создания этих карт используются топографические карты, то есть все исследования в этой области являются проводятся и должны проводиться на основе топографических карт. Здесь следует отметить, что на топографических картах четко показаны все природные объекты и отрасли экономики, существующие в природе и обществе, то есть качество топографических карт четко отражает этап развития страны. Словом, на рельефных пластиковых картах четко изображены «картины» и структура рельефа.

Под исследованием строения рельефа мы понимаем изучение небольших дельт, образовавшихся в результате поверхностного стока вод в дельтовых условиях, и их древовидной формы. Иными словами, в дельтовых геосистемах в результате поверхностного стока вод формируются только древовидные структуры рельефа. Начнем наши исследования с анализа пластиковых карт рельефа, основанных преимущественно на крупных топографических картах (1:25000), и в результате все ранее неизвестные науке мелкие дельты хотя и имеют древовидную структуру, но резко отличаются друг от друга по внутреннему строению. Тот факт, что малые дельты отличаются друг от друга по своему внутреннему строению, безусловно, оказывает непосредственное влияние на их природные и мелиоративные условия.

Если использовать метод пластичности рельефа при изучении структуры и слоистости рельефа, то он, с одной стороны, связан с учением о структуре в науке философии и его применением в науке естествознания, а с другой. с другой стороны, в формировании структуры рельефа мы уделяем особое внимание географической роли причинного поверхностного стока вод. Здесь уместно упомянуть теоретическую статью, написанную известным гидрологом С. Д. Муравейским в 1948 году, то есть работу «Роль географических факторов в формировании географических комплексов». Иными словами, ученый придает большое значение поверхностным водным потокам в формировании географических комплексов и так описывает их роль: «Не может быть движения без транспорта, миграции, взаимосвязи, взаимной тайны быть не может. В этом заключается важная роль транспорта, перемещение веществ по поверхности Земли в первую очередь и главным образом осуществляется процессом поверхностного стока вод. Короче говоря, даже в условиях дельты, если бы поверхностный водный поток не выполнял свою транспортную роль, дельтовая геосистема не сформировалась бы, то есть роль поверхностного водного потока здесь играла Амударья и ее ветки.

Как и во всех науках, в естественной географии большое внимание уделялось выделению мельчайших единиц природы и ее исследованию.

Например, в естественной географии, по мнению различных ученых, наименьшими единицами являются «фация», «микроландшафт», «биогеоценоз», «элементарный ландшафт» и другие. Другими словами, эти мелкие единицы являются элементами, сумма которых образует систему, то есть объект. Ф. А. Слудский, известный естествоиспытатель XIX века, писал об основной цели исследования явления в природе: «Разложение сложного явления на простые элементы, показ того, что оно состоит из этих элементов, должно лечь в основу объяснения явления для естествоиспытатель».

Мы всячески поддержали идеи учёного и впервые в современной дельте Амударьи выделили на пластиковой карте рельефа небольшие дельты. Мы знаем, что в условиях дельты река разделяется на несколько рукавов и впадает в водоемы. Одним из крупнейших наших достижений является создание рельефных пластиковых карт на топографических картах крупного масштаба (1:25000). Другими словами, если бы мы сделали пластику рельефа на топографических картах масштаба 1:50000, то эти небольшие дельты не были бы разделены, а значит, на топографических картах масштаба 1:50000 горизонтали встречаются очень редко. Поэтому мы использовали топографические карты масштаба 1:25000, то есть поскольку на этих топографических картах горизонталь проходит через каждые 2,5 м, мы смогли показать реальное строение рельефа дельты. Словом, благодаря масштабности создаваемых пластиковых карт рельефа, мы впервые разделили 9 малых дельт в нынешней дельте Амударьи. Каждая из обособленных малых дельт связана с рукавами Амударьи, и практическое значение этих карт возрастает с каждым годом.

При исследовании структуры рельефа следует отметить, что основанная на этом учении теория строения рельефа философии и теория рельефопластического метода, анализирующая структуру рельефа, в науке естествознания географии имеют важное значение. На основе теории строения всесторонне наглядно показаны основные этапы использования метода рельефной пластики. Иными словами, исследование рельефной структуры объекта базируется на теории метода рельефной пластики, изучающей взаимоотношения элементов (высот и понижений) друг с другом.

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СОВРЕМЕННЫЕ ПОДХОДЫ К МОДЕЛИРОВАНИЮ БИЗНЕС-ПРОЦЕССОВ В УСЛОВИЯХ ЦИФРОВОЙ ТРАНСФОРМАЦИИ

Аннотация: *Традиционные методологии моделирования бизнес-процессов продолжают играть ключевую роль в описании и анализе операций организации. В статье представлены основные характеристики методологий BPMN, IDEF0 и EPC, их преимущества и недостатки, а также возможности интеграции с современными цифровыми платформами.*

Ключевые слова: *бизнес-процесс, цифровая трансформация, моделирование, автоматизация, цифровые платформы.*

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MODERN APPROACHES TO BUSINESS PROCESS MODELING IN THE CONTEXT OF DIGITAL TRANSFORMATION

Abstract*: Traditional business process modeling methodologies continue to play a key role in the description and analysis of organizational operations. The article presents the main characteristics of BPMN, IDEF0, and EPC methodologies, their advantages and disadvantages, as well as opportunities for integration with modern digital platforms.*

Keywords*: business process, digital transformation, modeling, automation, digital platforms.*

Традиционные методологии и нотации моделирования давно зарекомендовали себя как основные инструменты для описания и анализа бизнес-процессов. Сегодня они активно интегрируются с цифровыми платформами, что позволяет не только визуализировать процессы, но и автоматизировать их. Такой синтез традиционных подходов и современных цифровых решений становится ключевым элементом для повышения эффективности, гибкости и адаптивности организаций в условиях цифровой трансформации.

BPMN (Business Process Modeland Notation) является одной из самых распространённых нотаций для моделирования бизнес-процессов. Она предоставляет удобные и стандартные иконки для визуализации информации об этапах процесса, участниках и ресурсах.

Основными преимуществами BPMN являются визуальная простота, доступность понимания и универсальность. Она позволяет моделировать сложные процессы, делая их понятными для всех участников. Однако применение BPMN может быть затруднено при описании высоко детализированных процессов или систем с большим числом нестандартных операций.

IDEF0 (Integration Definition for Function Modeling) – это методология моделирования, ориентированная на описание функций и их взаимодействий в системе. Она используется для создания иерархических моделей, которые детализируют процессы через декомпозицию задач на более мелкие уровни.

Преимуществом IDEF0 является возможность глубокого анализа процессов и удобство описания многоуровневых систем. Нотация позволяет структурировать даже самые сложные процессы, делая их более понятными для всех участников. Среди недостатков IDEF0 можно выделить его сложность в применении для описания динамических процессов, где важны временные аспекты. Также графическое представление может быть менее интуитивным по сравнению с BPMN.

EPC (Event-driven Process Chain) является методология моделирования, предназначенной для описания последовательности событий и функций, которые их активируют. EPC помогает наглядно представить, как события в бизнес-процессах приводят к выполнению различных функций и задач, а также как эти функции взаимодействуют между собой.

Преимуществом EPC является её удобство для анализа последовательности событий. Она легко интегрируется с системами ERP и поддерживает моделирование процессов с учётом временной шкалы. Однако EPC не всегда подходит для описания процессов с высокой степенью детализации или большим числом участников. Её использование требует специализированных знаний и программного обеспечения, что может ограничить её применение в небольших организациях.

В таблице 1 представлено сравнение описанных методологий моделирования бизнес-процессов.

Таблица 1 - Сравнительная характеристика методологий

Методология	Преимущества	Недостатки
BPMN	Простота, визуальная наглядность, универсальность	Не подходит для описания процессов с высокой степенью вариативности или нетипичных сценариев
IDEF0	Возможность глубокого анализа, структура сложных процессов	Не предназначена для описания процессов с выраженными временными зависимостями
EPC	Удобство анализа последовательности событий, интеграция с ERP	Не может эффективно описывать процессы с высокой степенью детализации или большим числом участников

Интеграция методов моделирования с цифровыми платформами позволяет организациям не только эффективно визуализировать бизнес-процессы, но и полностью автоматизировать их, что значительно повышает оперативность исполнения задач. Платформы для моделирования дают возможность разрабатывать процессы с удобными интерфейсами, проводить их тестирование и интегрировать с различными информационными системами, включая внешние сервисы и базы данных [1].

Одной из таких платформ является Camunda. Она предназначена для моделирования, выполнения и контроля бизнес-процессов. Благодаря высокой производительности и масштабируемости, Camunda подходит для крупных организаций, где требуется автоматизация сложных процессов с большим объемом данных.

Другим примером является платформа ELMA, которая предлагает широкий функционал для автоматизации бизнес-процессов. Система поддерживает моделирование процессов с использованием BPMN, а также их настройку и запуск в интерфейсе платформы. ELMA удобна в использовании, предоставляет интуитивно понятные инструменты и хорошо подходит для компаний, стремящихся к упрощению и ускорению своих рабочих процессов. Для примера, на рисунке 1 представлена диаграмма бизнес-процесса согласования и оплаты счетов, выполненная на платформе ELMA [2].

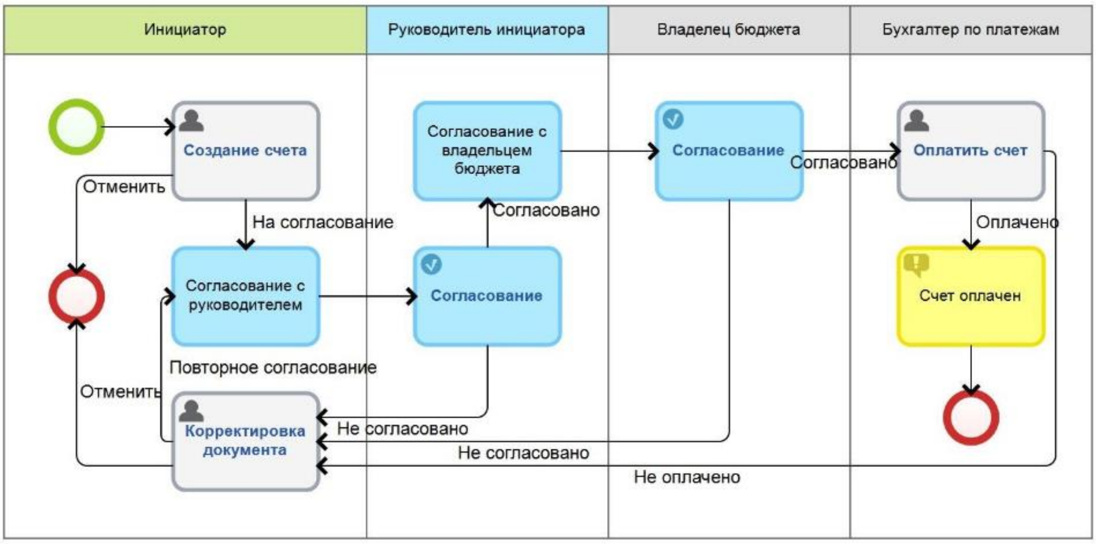

Рисунок 1 - Диаграмма бизнес-процесса согласования и оплаты счетов

Таким образом, методологии BPMN, IDEF0 и EPC, являясь традиционными инструментами моделирования, сохраняют свою актуальность. Однако их применение в современном контексте существенно меняется благодаря интеграции с цифровыми платформами. Такой подход не только улучшает визуализацию и анализ процессов, но и открывает новые возможности для их автоматизации, что позволяет значительно повысить оперативность, снизить затраты и улучшить управление бизнесом в условиях динамичного рынка.

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ПРИНЯТИЕ РЕШЕНИЙ ПРИ ФОРМИРОВАНИИ РЕШЕНИЙ ПРИ АНАЛИЗЕ ДАННЫХ О ЧРЕЗВЫЧАЙНЫХ СИТУАЦИЯХ В РЕГИОНЕ

Аннотация*: в данной статье авторами рассматривается процесс принятия решений при анализе данных о чрезвычайных ситуациях.*
Ключевые слова*: проектирование, принятие решений, чрезвычайные ситуации.*

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DECISION MAKING WHEN FORMING DECISIONS WHEN ANALYZING DATA ON EMERGENCY SITUATIONS IN THE REGION

Abstract*: In this article, the authors examine the decision-making process when analyzing emergency data.*
Key words*: design, decision-making, emergency situations.*

Современные информационные технологии играют ключевую роль в обеспечении эффективного управления чрезвычайными ситуациями (далее - ЧС). В условиях нарастающих угроз природных и техногенных катастроф важность систем поддержки принятия решений (далее - ППР) становится все более очевидной. Принятие правильных и своевременных решений в момент ЧС способно минимизировать ущерб, спасти жизни и обеспечить сохранность инфраструктуры. Важную роль в этих процессах играет оперативное и точное информирование ответственных лиц о происходящих инцидентах, их классификация и оценка степени опасности.

Особую значимость приобретает региональный аспект. Чрезвычайные ситуации, возникающие в различных субъектах Российской Федерации, имеют свои особенности в зависимости от географического положения, климатических условий и социально-экономической специфики региона. Так, в северных регионах, таких как Вологодская область, ключевыми рисками могут являться лесные пожары в летний период, аварии на объектах жизнеобеспечения в зимний сезон, а также наводнения весной и осенью. Эти региональные особенности требуют разработки специализированных алгоритмов и методик, которые бы учитывали не только характер и масштаб инцидентов, но и сезонность, специфические риски региона, а также приоритетность информирования различных уровней управления.

Одним из ключевых элементов предлагаемого подхода является внедрение системы приоритетов, где каждому инциденту будет присваиваться вес в зависимости от ряда параметров, таких как тип ЧС, его потенциальные последствия, сезонность и локальные условия. Например, лесные пожары летом в лесных массивах Вологодской области могут иметь высокий вес и требовать немедленного оповещения ключевых лиц в управлении, тогда как аварии на объектах жизнеобеспечения зимой могут иметь еще больший вес и требовать более оперативного реагирования в условиях низких температур. Предлагаемая методика позволит оперативно и точно передавать данные и адаптировать алгоритмы оповещения под каждую конкретную ситуацию, что повысит скорость и качество принятия решений.

Кроме того, в современных системах зачастую отсутствует возможность гибкого управления процессом оповещения ответственных лиц. В большинстве случаев, как показали предварительные исследования, процесс оповещения сводится к отправке уведомлений заранее определенному списку лиц, вне зависимости от реальной степени угрозы или её изменения в процессе развития ситуации. Такая статическая модель оповещения не учитывает необходимость ускоренного реагирования при повышении критичности инцидента или же возможность замедленного оповещения при снижении угрозы.

По данной теме производилось много исследований применения информационных интеллектуальных систем поддержки управленческих решений в рамках структур МЧС России. Исследования фокусируются на улучшении эффективности работы органов управления в условиях чрезвычайных ситуаций. В частности, рассматриваются задачи интеграции систем для автоматизации процесса принятия решений [6, 7]. Такие системы помогают обработать большие массивы данных в режиме реального времени, что критично для управления в кризисных ситуациях. Эти исследования подчеркивают важность создания единой централизованной системы передачи данных для обеспечения быстрого принятия решений в кризисных условиях.

Однако, на уровне региональных ситуационных центров подобные автоматизированные системы, обеспечивающие такой уровень поддержки принятия решений, как правило, не используются. В большинстве случаев процесс обработки данных и принятия решений по-прежнему осуществляется вручную, что приводит к задержкам в реагировании, а также увеличивает риск ошибок из-за человеческого фактора. Например, в ситуационном центре Вологодской области до сих пор не внедрены автоматизированные системы, способные учитывать региональные и сезонные особенности, классифицировать и приоритизировать инциденты, а также назначать ответственных лиц для оперативного реагирования. Отсутствие таких систем замедляет процесс передачи информации и принятия решений, что может существенно снизить эффективность реагирования на чрезвычайные ситуации.

Целью работы является совершенствование процесса принятия решений при классификации и приоритизации чрезвычайных ситуаций.

В настоящее время процесс обработки данных о чрезвычайных ситуациях в ситуационном центре Вологодской области начинается с поступления данных из ГИС "Система-112". Эта информация может включать новые инциденты или обновления по уже зарегистрированным происшествиям. Далее данные поступают оператору, который определяет масштаб инцидента. Справочник категорий используется для уточнения характера происшествия и его уровня опасности. После того как инцидент классифицирован, он регистрируется в системе, и формируется список ответственных лиц, которых необходимо уведомить для реагирования на ситуацию.

Затем оператор инициирует процесс оповещения, заполняя соответствующие поля в реестре, после чего отправляются уведомления выбранным ответственным лицам в зависимости от масштаба и характера инцидента. Хотя система предоставляет базовые инструменты для обработки данных, многие этапы по-прежнему зависят от участия оператора, что может замедлять процесс реагирования и увеличивать вероятность ошибок. Внедрение методики и алгоритма могло бы значительно повысить эффективность реагирования на чрезвычайные ситуации. Ниже представлена контекстная диаграмма текущего процесса обработки данных о ЧС (Рисунок 1).

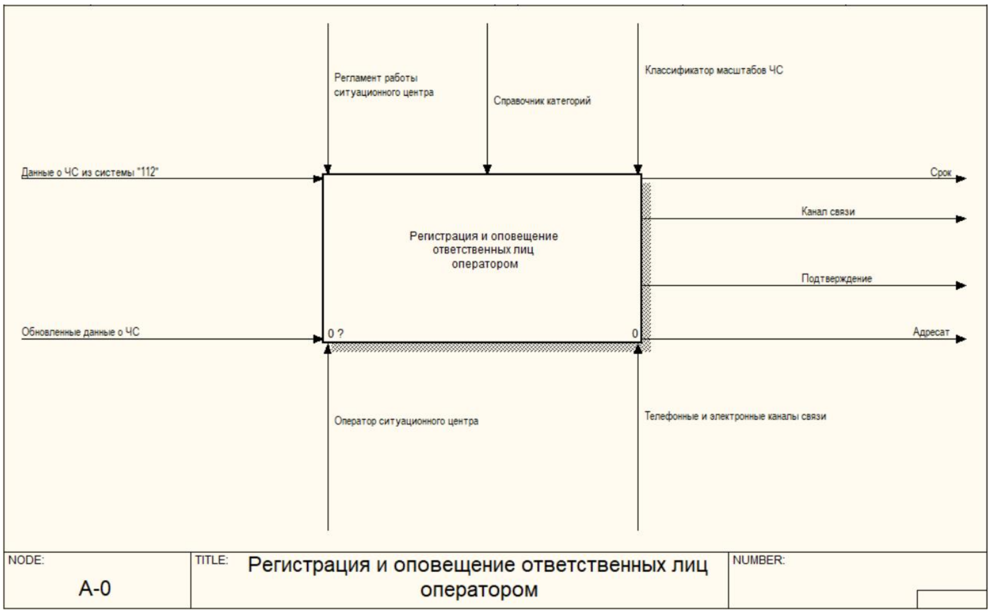

Рисунок 0 – Контекстная диаграмма «Регистрация и оповещение ответственных лиц оператором»

В данном разделе рассмотрено текущее состояние бизнес-процесса управления ЧС в Вологодской области. Основной акцент сделан на взаимодействии с ГИС «Система-112», а также на сборе, обработке данных о ЧС и оповещении ответственных лиц. В текущей модели значительная часть этапов выполняется вручную, что замедляет реагирование на инциденты и увеличивает вероятность ошибок.

Этапы текущего бизнес-процесса:

1) Поступление данных о чрезвычайной ситуации через ГИС «Система-112»: основным источником данных о ЧС является ГИС «Система-112», через которую поступают вызовы от граждан и организаций. Вызовы могут касаться различных типов инцидентов, таких как пожары, наводнения, аварии на объектах жизнеобеспечения, дорожно-транспортные происшествия и другие; операторы ГИС «Система-112» фиксируют вызовы и заносят их в базу данных. Информация о ЧС включает место происшествия, краткое описание и первичные сведения о масштабах инцидента.

2) Регистрация инцидента в ситуационном центре: в ситуационном центре оператор вручную регистрирует поступивший инцидент в системе, основываясь на данных, полученных через ГИС «Система-112». Для каждого инцидента создается запись с указанием его типа (пожар, авария, ДТП и т. д.), местоположения и предполагаемого масштаба; присвоение категории: В текущей модели категории инцидентов (например, природный пожар или авария на объекте жизнеобеспечения) присваиваются вручную на основе информации, полученной от оператора, ГИС «Система-112».

3) Оповещение ответственных лиц: после регистрации инцидента оператор ситуационного центра вручную оповещает ответственные службы и должностных лиц. В зависимости от типа инцидента это могут быть МЧС, пожарные службы, полиция, службы жизнеобеспечения и другие

организации; оповещение производится через электронную почту или телефонные звонки, исходя из заранее определенного списка контактов.

4) Реагирование и мониторинг: после оповещения ответственных лиц начинается процесс реагирования на инцидент. Операторы ситуационного центра продолжают мониторинг ситуации, получая данные о ходе ликвидации ЧС и при необходимости координируют действия служб. Недостатки текущей модели:

– ручная обработка данных, на всех этапах процесса присутствует ручной ввод и обработка данных, что увеличивает время реакции на инциденты и повышает риск ошибок;

– отсутствие автоматической приоритизации инцидентов: оценка критичности инцидентов производится вручную и не учитывает автоматически региональные или сезонные факторы;

– статичность системы оповещения, оповещение ответственных лиц не учитывает динамическое изменение ситуации, что может приводить к неэффективности в процессе реагирования.

Ниже представлена диаграмма декомпозиции контекстной диаграммы «Регистрация и оповещение ответственных лиц оператором» (Рисунок 2).

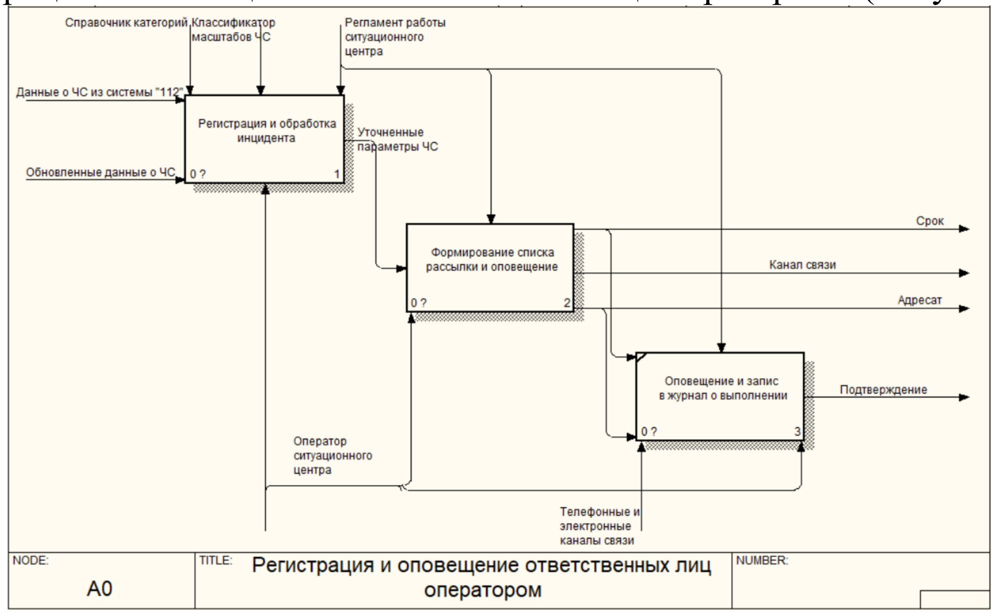

Рисунок 2 – Диаграмма декомпозиции контекстной диаграммы «Регистрация и оповещение ответственных лиц оператором»

Диаграмма декомпозиции включает в себя 3 функциональных блока:

– регистрация и обработка инцидента;

– формирование списка рассылки и оповещение;

– оповещение и запись в журнал о выполнении.

Ниже представлена декомпозиция функционального блока «Регистрация и обработка инцидента», который состоит из 3 функциональных блоков;

– прием данных из системы «112»;

– ручная классификация данных ЧС;

– обновление данных (Рисунок 3).

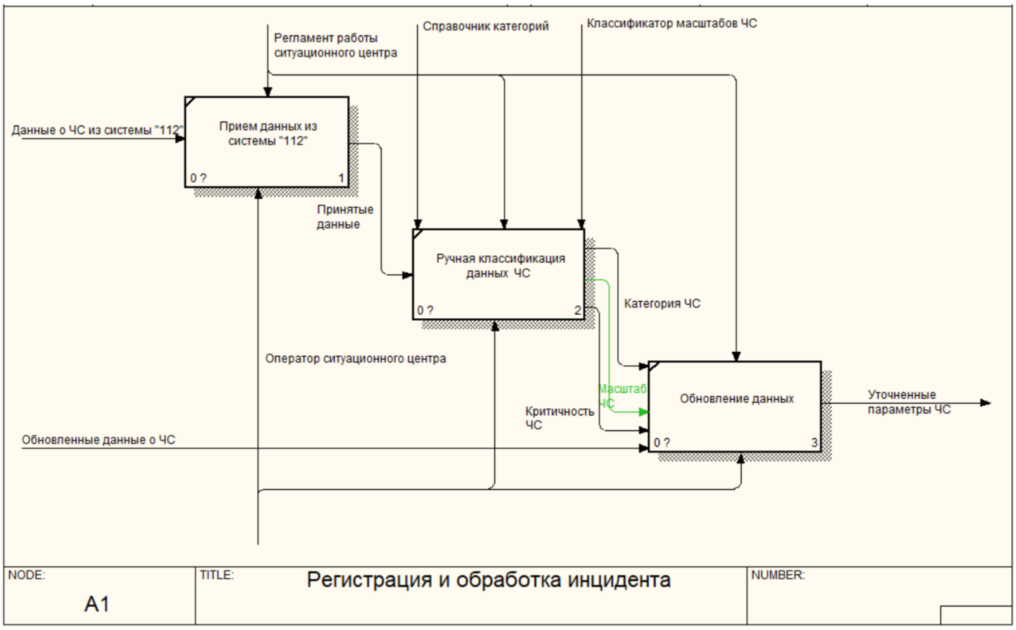

Рисунок 3 - Декомпозиция функционального блока «Регистрация и обработка инцидента»

Ниже представлена модель «КАК БУДЕТ» предметной области. По предложенной модели видны следующее изменения: добавлено «Руководство пользователя» в качестве стрелки-управления; добавлен «Лог выполненных действий» в качестве стрелки-выхода; добавлена аналитическая система в качестве стрелки-механизма.

Контекстная диаграмма «КАК БУДЕТ» представлена ниже (Рисунок 5).

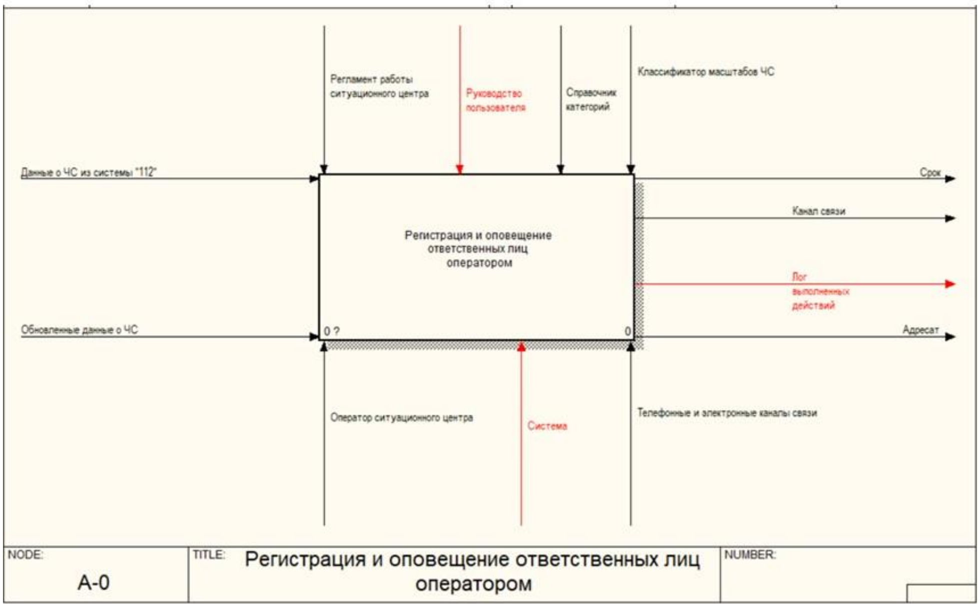

Рисунок 5 - Контекстная диаграмма «КАК БУДЕТ» процесса «Регистрация и оповещение ответственных лиц оператором»

Ниже представлена диаграмма декомпозиции контекстной диаграммы «Регистрация и оповещение ответственных лиц оператором» (Рисунок 6).

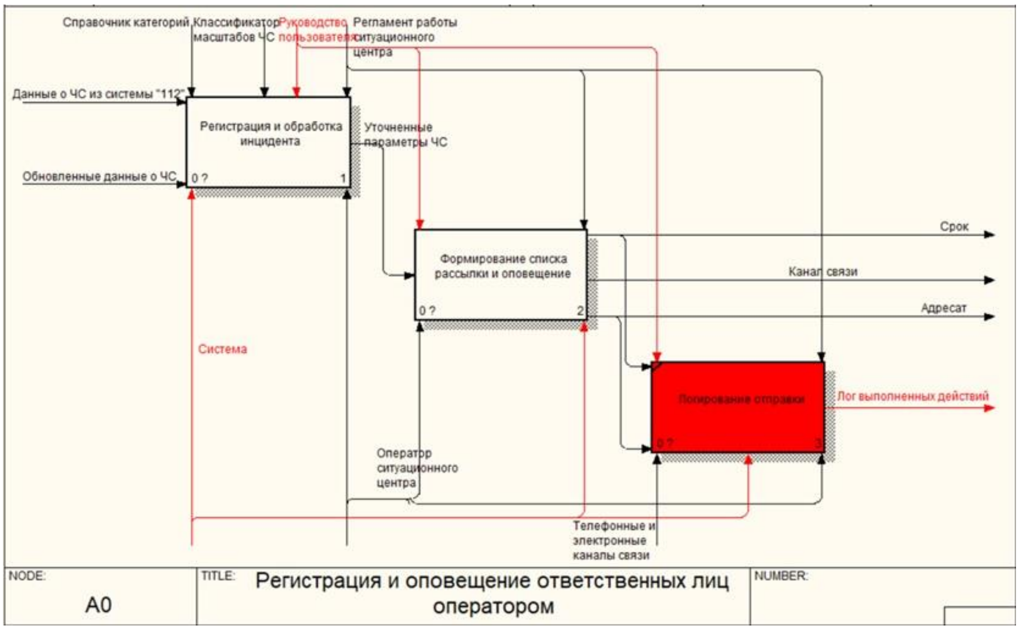

Рисунок 6 - Диаграмма декомпозиции контекстной диаграммы «Регистрация и оповещение ответственных лиц оператором»

Исходя из рисунка выше можно сделать вывод о том, что будет усовершенствован функциональный блок «Логирование отправки».

Ниже представлена декомпозиция функционального блока «Регистрация и обработка инцидента» (Рисунок 7).

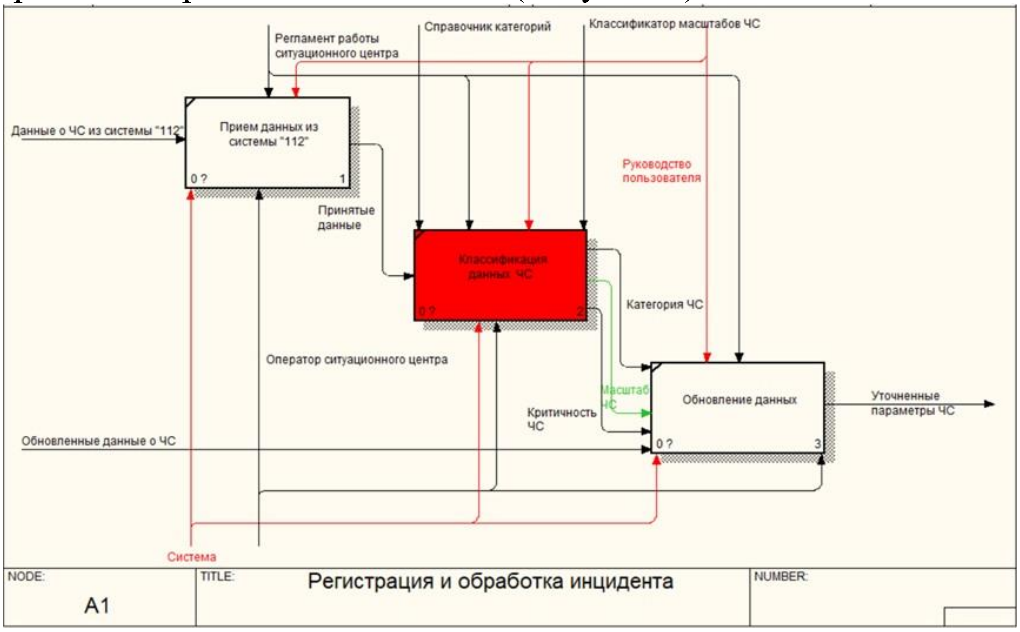

Рисунок 7 - Декомпозиция функционального блока «Регистрация и обработка инцидента»

Исходя из вышеописанного, можно сделать вывод о том, что был автоматизирован блок «Классификация данных ЧС».

Таким образом, предложенная методика обеспечивает ускорение процесса сбора, классификации и обработки данных о ЧС, что позволяет эффективно управлять ситуациями в зависимости от их критичности. Она также оптимизирует процесс оповещения ответственных лиц, уменьшая время на принятие решений и минимизируя последствия чрезвычайных ситуаций.

Результаты проведенных вычислительных экспериментов иллюстрируют работоспособность предлагаемой методики поддержки принятия решений при реализации процесса оповещения ответственных лиц, которая назначается исходя из критичности инцидентов и «веса».

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ИНВЕСТИЦИЯ МУҲИТИ ЖОЗИБАДОРЛИГИ ХУСУСИДАГИ ИЛМИЙ-НАЗАРИЙ ҚАРАШЛАР ТАЛҚИНИ

Аннотация. *Ушбу мақолада инвестиция муҳити жозибадорлигининг мазмун-моҳияти ва аҳамияти тадқиқи қилинган, унинг ўзига хос хусусиятлари очиб берилган. Мамлакатда инвестиция муҳитига таъсир этувчи омиллар тавсифланган ва таснифланган. Тадқиқот натижалари асосида инвестиция муҳити жозибадорлигини оширишга қаратилган таклиф ва тавсиялар ишлаб чиқилган.*

Калит сўзлар: *инвестиция, инвестиция муҳити, жозибадорлик, хорижий инвестициялар, инвестиция фаолияти, молиявий имтиёзлар, асосий капитал, модернизация, инвестиция рисклари, инвестицион салоҳият, интенсив ривожланиш.*

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INTERPRETATION OF SCIENTIFIC AND THEORETICAL VIEWS ON THE ATTRACTIVENESS OF THE INVESTMENT ENVIRONMENT

Annotation. *This article examines the importance of the attractiveness of the investment environment, reveals its distinctive features. The factors influencing the investment environment in the country are described and classified. Based on the results of the study, proposals and recommendations were developed aimed at increasing the attractiveness of the investment environment.*

Keywords: *investments, investment environment, attractiveness, foreign investments, investment activity, financial benefits, capital, modernization, investment risks, investment potential, intensive development.*

Инвестиция муҳити жозибадорлигини таъминлаш масаласи мамлакатимизда инвестиция фаолиятини ривожлантириш, хорижий инвестицияларни фаол жалб қилиш, иш ўринларини яратиш ва аҳолини банд қилиш, ишлаб чиқаришда интенсив ривожланишга эришиш ва меҳнат унумдорлигини ошириш, асосий капитални модернизация қилишда ҳал қилувчи рол ўйнайди. Шу муносабат билан «мамлакатда инвестиция муҳитини янада яхшилаш ва унинг жозибадорлигини ошириш, келгуси беш йилда 120 млрд долл., жумладан 70 млрд долл. хорижий инвестицияларни жалб этиш чораларини кўриш» [1] масаласи 2022-2026 йилларга мўлжалланган Янги Ўзбекистоннинг тараққиёт стратегиясида муҳим устувор вазифа сифатида белгилаб олинди.

Шундай экан, учта мустақил сўздан иборат бўлган бу иборанинг мазмун-моҳияти нимани англатади? Унинг негизида нима(лар) ётади? Уни тилга олганимизда кўз ўнгимизда нима(лар) гавдаланади? Моҳиятан «инвестиция муҳити жозибадорлиги» ўзи нима? Бу ибора нималарни қамраб олиши зарур ва уни идрок этиш (тушуниш) жараёнида нималарга эътибор бермоқ лозим?...

Иқтисодий адабиётларда инвестиция муҳити жозибадорлиги масаласи кўплаб хорижлик ва маҳаллий иқтисодчи-олимлар томонидан тадқиқ этилган. Жумладан, иқтисодчи-олимлар Э.Долан [2], Дж.Кейнс [3], Кэмпбелл Р. Макконнелл [4], Пол А. Самуэльсон, Вильям Д. Нордхаус [5], Й.Шумпетер [6], Л.Агаева, В.Анисимова [7], Г.Литвинцева [8] илмий ишларида инвестицияларнинг мазмун-моҳияти ва хусусиятлари, инвестиция муҳити ва унинг жозибадорлиги, хорижий инвестицияларни жалб қилишнинг илмий-назарий асослари, минтақанинг инвестициявий жозибадорлиги, ҳудудларнинг инвестицияларни жалб этувчанлигини ошириш омиллари каби масалалар тадқиқ қилинган.

Маҳаллий иқтисодчи-олимлардан А.Вахабов [9], Т.Маликов [10], Д.Ғозибеков [11], Х.Имомов [12], Ш.Мустафакулов [13] ларнинг илмий ишларида инвестиция фаолиятини амалга ошириш ва инвестицияларни молиялаштириш механизмлари, инвестиция муҳити ва унинг жозибадорлигини ошириш масалалари, хорижий инвестицияларни кенг кўламда жалб қилиш, ҳудудларда инвестиция фаолиятини ривожлантириш масалалари тадқиқ қилинган.

«Инвестиция муҳити жозибадорлиги» тушунчаси мураккаб маънога эга бўлиб, инвестиция тушунчаси назария ва амалиётда халқаро атама сифатида дунёнинг барча халқлари тилида бир хил маънода қўлланилади. Муҳит ва унга нисбатан қўлланиладиган жозибадорлик атамалари ўзбек тилида нисбатан камроқ ишлатиладиган сўздир. Шу нуқтаи назардан ушбу сўз бирикмасининг замирида, негизида нималар ётганлиги ва моҳиятан у нималарни билдириши мумкинлигини англаш мураккабдир.

Биринчидан, Ўзбек тилининг имло луғатида «инвестиция (нем. investition, лот. investire – кийинтирмоқ, сарпо бермоқ) – мамлакат ичкарисида ёки чет элда фойда кўриш мақсадида бирор корхонага, иқтисодиётнинг муайян тармоғига капитал қўйиш, киритиш ва шундай капиталнинг ўзи» [14] сифатида ифодаланган. Амалдаги қонунчиликда «инвестициялар – инвестор томонидан фойда олиш мақсадида ижтимоий соҳа, тадбиркорлик, илмий ва бошқа фаолият турлари объектларига таваккалчиликлар асосида киритиладиган моддий ва номоддий бойликлар ҳамда уларга бўлган ҳуқуқлар, шу жумладан интеллектуал мулк объектларига бўлган ҳуқуқлар, шунингдек реинвестициялар» [15] сифатида таърифланган.

Иккинчидан, «муҳит» тушунчаси (араб. – ўраб олинган, иҳота этган, иҳота этилган): ҳаёт, фаолият кечадиган табиий ва ижтимоий шароитлар мажмуи; географик ва ижтимоий муҳит; ҳодиса жараён ва шу каби кечадиган моддий шароит» [16] тарзида ифодаланган.

Учинчидан, «жозибадорлик» сўзи, фақат сўзларнинг ўзига эътибор бериладиган бўлса, араб ва форс тилидаги сўзлар бирикмасидан ташкил топган бўлиб, у «ўзига мафтун этишлик», «ўзига жалб этишлик» маъно-мазмунларини англатади. Хусусан, бунда: 1) «жозиб – ўзига тортувчи, мафтун қилувчи, ўзига жалб этувчи; 2) жозиба – ёқимлилик, дилбарлик, малоҳат; 3) жозибадор – жозибага эга, мафтун этувчи, ўзига тортувчи, мафтун қилувчи, жозибали; 4) жозибадорлик – ўзига мафтун этишлик, ўзига жалб этишлик» [17] каби сўзларнинг ҳам қандай маъно-мазмун англатиши мумкинлигига эътибор бермоқ зарур.

Юқоридагилардан келиб чиқиб, инвестиция муҳити жозибадорлиги хусусида қуйидагиларни алоҳида қайд этиш зарур:

инвестициялар иқтисодиётни интенсив ривожлантириш мақсадида ўз мамлакатида ёки чет элларда турли тармоқларга, ижтимоий-иқтисодий дастурларга, инновация, тадбиркорлик лойиҳаларига узоқ муддатли сармоя киритишдир. Инвестиция сармояни муайян муддатга боғлашни ёки банд қилишни билдиради. Сармоя бу рус тилида капитал тушунчасини билдиради ва унинг ҳаракати, яъни бирор бир тармоқ ёки соҳага жойлаштирилиши уни инвестицияга айлантиради. Бундан асосий мақсад капитал қийматини сақлаб қолиш ёки бўлмаса капитал қийматини вақтда ўстириб боришдир. Иқтисодий мазмуни жиҳатдан инвестиция турли фаолиятларга сафарбар этилган моддий, номоддий бойликлар ва уларга бўлган ҳуқуқларни акс эттиради. Бундан кўринадики, инвестициялар фойда олиш ёки бошқа самараларга эришиш мақсадида моддий ва номоддий объектларга жойлаштириладиган барча турдаги бойликлар, шу жумладан, мулкий ҳуқуқлар, шунингдек асосий фондларни барпо этиш ва модеринзация қилишга йўналтирилган капитал қўйилмаларни ифода этади;

муҳит – бу инвестициялар жойлаштириладиган, инвестицияларни амалга оширишдаги шарт-шароитларни, инвестиция муносабатлари ва тартиб-қоидалари мажмуини ўз ичига олади. Инвестиция муҳити ўзгаради ва бу ўзгаришлар жараёнида инвестициялар ҳам таркибий жиҳатдан ўзгариб боради;

жозибадорлик – инвестициялар самарадорлигининг таъминланиши ифодаси сифатида мавжуд рисклар ва инвестиция салоҳияти билан шаклланган ҳудудий иқтисодиётнинг ҳолатини ифода этади. Бунда инвестиция қўйилмаларининг мақсадга мувофиқлиги, самарадорлиги ва риск даражасига таъсир қилувчи омиллар мажмуига, қулай ва барқарор ҳуқуқий режимга, хорижий инвесторларга мулкини миллийлаштириш хавфидан кафолатлар берилиши ва унинг ҳуқуқларини камситмайдиган режим яратилишига, инвестицияларнинг кириб келишини белгиловчи ва инвестиция фаоллиги билан баҳоланадиган объектив иқтисодий, ижтимоий ва табиий воситалар, имкониятлар ва чекловларга алоҳида эътибор қаратилади.

Бундан кўринадики, инвестиция муҳити жозибадорлиги инвестициялар самарадорлиги ва рентабеллигининг таъминланишига имкон беради. Инвестиция муҳити жозибадорлиги ҳудуд инвестиция муҳитининг ажралмас қисми бўлиб, унга таъсир этувчи барча омиллар ва кўрсаткичлар мажмуи бўлиб, инвестициявий салоҳият ва инвестиция риски даражаси инвестициявий жозибадорликни белгилаб беради. Инвестиция муҳити жозибадорлиги тушунчасининг мазмун-моҳияти кўриб чиқилаётган пайтда инвестиция салоҳияти ва инвестиция муҳити тушунчалари марказий майдоннои эгаллайди. Сабаби, улар бир-бири билан чамбарчас боғлиқ тушунчалар бўлиб, инвестиция салоҳияти инвестиция фаолиятининг ресурс имкониятларини аниқлаб беради ва ушбу ресурслардан фойдаланиш, ўз навбатида, таҳлил қилинаётган объектнинг инвестициявий жозибадорлигига боғлиқ бўлади ва албатта, шарт-шароитлар ва турли омилларни инвестициявий муҳит ҳолатини белгилаб беради.

Инвестиция муҳити табиий шарт-шароитлар, фойдали қазилмалар захиралари, ишчи кучи малакаси ва ўртача иш ҳақи даражаси, иқтисодий конъюнктура ҳолати, ички бозор сиғими, товарларни ташқи бозорда сотиш имкониятлари, валюта сиёсати, кредит тизими ҳолати, солиққа тортиш даражаси, ишлаб чиқариш ва ижтимоий инфратузилманинг ривожланганлиги, хорижий капиталга нисбатан давлат сиёсати, унга нисбатан имтиёзли шарт-шароитларнинг яратилганлиги каби омиллар орқали белгиланади.

Қулай инвестиция муҳитини яратишнинг муҳим жиҳатларидан бири ҳуқуқий-меъёрий база бўлиб, у ҳар бир салоҳиятли инвесторнинг мулкий манфаатларини ҳимоялаши, кафолатлаши, шунингдек мамлакатдаги мавжуд инвестиция механизмининг тушунарли ва аниқ бўлишини таъминлаши лозим. Содда қилиб айтганда, инвестиция муҳити инвестиция муносабатларини амалга ошириш мумкин бўлган молиявий имкониятлар ва қўлайликлар мажмуасини ўзида акс эттирган воқеликдир. «Инвестиция муҳитини яхшилашдан мақсад инвестиция салоҳиятини ошириш учун зарур ва мақбул шарт-шароитларни яратиш, инвестиция фаолиятини жадаллаштириш ва пировардида, иқтисодиётни юксалтириш, ижтимоий муаммоларни ҳал этиш, ишлаб чиқариш самарадорлигини ошириш имконини яратишдан иборат» [18].

Республикада сиёсий-иқтисодий шароитнинг мавжудлиги, яъни қулай инвестиция муҳитининг яратилиши ва хорижий капитални қабул қилиш тизимининг самарали бўлиши хорижий инвестицияларни жалб қилишнинг зарурий шартидир. Инвестиция муҳити инвестиция ресурсларини жойлаштириш учун умумий мезон бўлиб, биринчи навбатда, капитал маблағларнинг даромадлилигини таъминлаб беради.

Мамлакатнинг инвестиция муҳитини шакллантирадиган ва унга таъсир этувчи омиллар мажмуини 1-жадвал орқали ифодалаш мумкин.

1-жадвал

Инвестиция муҳитига таъсир этувчи омиллар [19]

Омиллар	Мазмуни
Иқтисодий ҳолат	Мамлакат тўлов балансининг ҳолати, валюта-пул тизими барқарорлиги, ташқи иқтисодий алоқаларнннг ривожланганлиги, ички бозор сиғимининг катталиги, инфляция даражаси, ЯИМ, саноат ва қишлоқ хўжалиги маҳсулотлари ишлаб чиқаришнинг ўсиш суръатлари
Ҳуқуқий база	Янги шароитларга мос келадиган, мамлакат ва унинг алоҳида тармоқларининг ижтимоий-иқтисодий ривожланишини бошқарадиган ҳуқуқий-меъёрий, жумладан, республика Президентининг фармонлари ва қарорлари, ҳукумат қарорлари, тегишли низом ва йўриқномаларнинг мавжудлиги
Табиий хом ашё ресурслари	Минериал, хом ашё, ёқилғи-энергетика ва сув ресурслари захиралари, қишлоқ хўжалиги хом ашёсини ишлаб чиқариш ҳажмлари
Меҳнат ресурслари ва бандлик	Иқтисодий фаол аҳоли сони, банд аҳоли улуши, ишсизлик даражаси, хизматчилар даромади даражаси, кадрларнинг малака даражаси, аҳолининг саводхонлиги
Ишлаб чиқаришнинг техник базаси	Асосий ишлаб чиқариш фондлари, ишлаб чиқариш қувватларидан фойдаланиш даражаси, ускуналарнинг фойдаланиш муддати, асосий фондларнинг эскириши даражаси
Илмий-техника салоҳияти	Иқтисодиётни ривожлантиришга қаратилган инвестициялар, шу жумладан, хорижий инвестициялар ҳажмлари, инвестиция рисклари даражаси, ишлаб чиқаришнинг техник жиҳозланиши, фан-техника ютуқларидан фойдаланиш, илмий-тадқиқот ва тажриба конструкторлик ишлари соҳасини ривожлантириш ҳолати, маҳсулотнинг фан сиғимкорлиги катта ва юқори технологик турларини ишлаб чиқариш
Молия-кредит тизими	Солиқ ва кредит сиёсати, иқгисодиётнинг реал сектори корхоналарининг фойдалилик ва рентабеллик даражаси. Нарх сиёсати ва нархни шакллантириш сиёсати
Инфратузилма	Банк тизимининг ривожланиши ҳолати, транспорт, коммуникация хизматлари ва мехмонхона хўжалиги соҳалари, товар ва фонд биржалари, маркетинг, консалтинг, аудиторлик хизматлари, суғурта соҳаси тармоғининг ишончлилиги
Экологик вазият	Атроф-муҳитнинг ифлосланиш даражаси, радиацион фон, зарарли чиқиндилар, табиий иқлим ва унинг ўзгариши, хорижий фуқароларнинг унга мослашиш даражаси

Ҳар қандай давлатга инвестицияларнинг кириб келиши ва ривожланиши мазкур мамлакатдаги инвестиция муҳитига таъсир этувчи омилларга бевосита боғлиқ бўлади. Мамлакатимиздаги инвестиция муҳитига таъсир этувчи омиллар, асосан, тўрт гуруҳга бўлиниб, улар ҳуқуқий, сиёсий, иқтисодий ва ижтимоий омилларни ташкил этадиФикримизча, инвестиция муҳити жозибадорлигини таъминловчи ва уни амалга оширишга хизмат қилувчи асосий омил, айнан, инвестиция салоҳияти ҳисобланади. Бунда мавжуд хом ашё ресурслари, демографик салоҳият, ишлаб чиқариш қувватлари, фан-техника тараққиёти ва инновациялар, ишлаб чиқариш, бозор ва ижтимоий инфратузилмалар, банк ва нобанк тизими, аҳолининг истеъмол талаби ва туризм салоҳияти кабилар ҳудудларнинг инвестициявий жозибадорлигини аниқлаш ва оширишда муҳим аҳамия касб этади.

Барқарор қонунчилик асослари, жумладан, инвесторлар учун инвестициялаш шарт-шароитларини яхшилайдиган, улар ҳуқуқларининг давлат томонидан кафолатланиши, турли солиқ ва божхона имтиёзларининг берилиши, мол-мулкларнинг сақланиши ва маблағлардан фойдаланишни кўзда тутувчи кафолатлар, барча турдаги инвестицияларнинг давлат томонидан ҳимоя қилиниши инвестиция муҳити жозибадорлигини таъминлаш ва оширишда ҳал қилувчи рол ўйнайди.

Фикримизча, инвестиция муҳити жозибадорлигини таъминлашда қуйидагиларга алоҳида эътибор қаратиш талаб этилади:

1. Инвестициялар ва инвестиция лойиҳалари билан боғлиқ рискларни суғурталаш тизимини такомиллаштириш, бу борада ҳуқуқий-меъёрий ҳужжатларнинг тўла маънода амал қилишига эришиш зарур.

2. Инвестиция муҳити жозибадорлиги ва барқарорлиги, фикримизча, давлатнинг хорижий инвестицияларга бўлган сиёсий муносабати, давлатнинг иқтисодиётга аралашуви даражаси, давлат аппарати бошқармасининг ишлаш самараси, давлатнинг сиёсий барқарорлиги, иқтисодиётнинг умумий ҳолати (ўсиши ёки инқироз), инфляция даражаси, валюта курсининг барқарорлиги, солиқ ва божхона имтиёзлари, ишчи кучларининг қиймати ва мехнат ресурсларини ишлатилиш тартиби, аниқ товар ва хизмат турларига бўлган талаб ва таклифнинг мавжудлиги, кредит баҳоси, қолаверса жамият аъзоларининг хорижий капитал ва хусусий мулкчиликни шаклланишига бўлган муносабати, жамиятнинг идеологик билимлари даражаси, ишчи кучларининг ташкилотчилик ва тадбиркорлик қобилияти каби омилларни чуқур ўрганиш ва таҳлил этиш асосида таъминлаш мумкин.

3. Ўзбекистоннинг глобал индексларда иштирок этиши ва ўрнининг юқорилаб бориши бошқа мамлакатларнинг қиёсий устунликларини аниқлаш имконини бериб, натижада инвестиция муҳитини яхшилаш бўйича келгуси ислоҳотлар йўналишларини белгилаб беради.

4. Ҳудудларда инвестицион жозибдорликни оширишнинг асосий йўналиши инвестицион имижини ривожлантиришнинг концептуал асосларини ишлаб чиқишдан иборат. Назарий ёндашувлар ва таҳлиллар маълум бир вилоятда инвестицион жозибадорликни оширишдаги асосий инвестиция стратегияси «ҳудуд имижи»ни шакллантириш эканлигини асослаш имконини берди. Муайян бир вилоятида инвестицияларни кенг жалб этишнинг асосий йўналиши «ҳудуд имижи»ни шакллантириш ҳисобланиб, унинг асосий йўналишлари ҳисобланган диагностик, лойиҳавий, ишлаб чиқиш, баҳоловчи асосномалардан иборат ташкилий-иқтисодий механизм тавсия этилади.

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СВЯЗЬ МЕЖДУ ЗАБОЛЕВАЕМОСТЬЮ КОКЛЮШЕМ, ПОЛОМ И ВОЗРАСТОМ

Аннотоция: *В данном исследовании изучались дети, больные коклюшем, в широкой выборке, включающей 100 заболевших детей, из которых 60 девочек и 40 мальчиков в возрасте от 1 до 6 лет. Цель исследования заключалась в сравнении результатов общего анализа крови у детей, больных коклюшем, в зависимости от возраста и пола. Это сравнение имеет важное значение для понимания влияния заболевания на показатели крови в зависимости от возраста и пола, а также для разработки стратегий контроля и лечения болезни. Результаты подчеркивают важность мониторинга и управления заболеванием у девочек и мальчиков и предоставляют данные, подчеркивающие необходимость целенаправленных подходов. Исследование показывает, что для профилактики, усиления контроля и координации лечения необходимо учитывать возрастные и половые различия.*

Ключевые слова: *общий анализ крови, возраст, пол, исследование, анализ, контроль, стратегии лечения.*

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THE RELATIONSHIP BETWEEN WHOOPING COUGH INCIDENCE AND GENDER AND AGE

Abstract: *This study examines children diagnosed with whooping cough in a broad cohort, including 100 affected children, 60 of whom are girls and 40 boys, aged 1 to 6 years. The focus of the research is on comparing the complete blood count results of children with whooping cough based on age and gender. This comparison is essential to understand the disease's impact on blood test parameters depending on age and gender and to establish strategies for disease control and treatment. The findings highlight the importance of monitoring and managing the disease in girls and boys and provide data emphasizing targeted approaches. This study demonstrates that prevention, enhanced monitoring, and treatment strategies must consider gender- and age-specific differences.*

Keywords: *complete blood count, age, gender, research, analysis, control, treatment strategies.*

ВВЕДЕНИЕ

Коклюш – это инфекционное заболевание, вызываемое бактерией Bordetella pertussis, которое широко распространено среди детей и представляет собой одну из серьезных угроз для их здоровья. Это заболевание, особенно у маленьких детей, протекает тяжело и характеризуется длительными и интенсивными приступами кашля. Тяжесть, которую коклюш накладывает на мировую систему здравоохранения, а также проблемы, связанные с его профилактикой, находятся в центре внимания медицинских исследований и стратегий здравоохранения [1]. Данное введение дает общее представление о значении изучения связи заболеваемости коклюшем с возрастом и полом, а также о целях и методах исследования. Среди 100 детей, больных коклюшем, в возрасте от 3 месяцев до 2 лет, 60 были мальчиками, а 40 – девочками. Во всем мире это заболевание по-прежнему остается актуальной проблемой и оказывает значительное влияние на системы здравоохранения. Актуальность коклюша обусловлена рядом факторов, включая эффективность программ вакцинации, социально-экономические условия, уровень развития системы здравоохранения и эпидемиологические особенности заболевания [2]. Коклюш ежегодно поражает миллионы детей по всему миру и становится причиной тысяч смертей. По данным Всемирной организации здравоохранения (ВОЗ), коклюш ежегодно затрагивает более 24 миллионов человек и приводит к смерти примерно 160 000 детей. Эти цифры подчеркивают масштабы распространения заболевания и его серьезность [7]. Для получения информации о распространении заболевания и мерах борьбы с ним необходимо проводить эпидемиологические исследования. Несмотря на то что в развитых странах заболеваемость коклюшем значительно снизилась благодаря программам вакцинации, в развивающихся странах это заболевание по-прежнему остается серьезной проблемой [10]. Недостаточное развитие программ вакцинации, ограниченный доступ к медицинским услугам и другие факторы способствуют широкому распространению заболевания.

Цель исследования: Изучение зависимости заболеваемости коклюшем от пола и возраста.

МАТЕРИАЛЫ И МЕТОДЫ ИССЛЕДОВАНИЯ

Для изучения зависимости заболеваемости коклюшем от пола и возраста были выбраны 100 детей в возрасте от 3 месяцев до 2 лет, которые проходили лечение в период с сентября 2023 года по февраль 2024 года. У всех детей были взяты результаты общего анализа крови, которые затем сравнивались по возрасту и полу. Дети были разделены на возрастные группы (3–6 месяцев, 7–12 месяцев, 13–18 месяцев, 19–24 месяца) с целью изучения уровня заболеваемости в зависимости от возраста. Среди обследованных 40 детей были мальчиками (40 %), а 60 – девочками (60 %). У данных пациентов проводились обследования и наблюдения. Исследование проводилось в отделении детских инфекционных заболеваний многопрофильной клиники Ташкентской медицинской академии.

РЕЗУЛЬТАТЫ

Распределение по полу

Таблица 1: Распределение детей, больных коклюшем, по полу.

Пол	**Количество**	**Процент (%)**
Мальчики	40	40%
Девочки	60	60%
Всего	100	100%

Из приведенной таблицы видно, что 40% детей, участвовавших в исследовании, были мальчиками, а 60% — девочками.

Распределение по возрасту

Таблица 2: Распределение детей, заболевших коклюшем, по возрасту.

Возрастная группа	Количество мальчиков	Количество девочек	Всего
3-6 месяцев	10	15	25
7-12 месяцев	12	18	30
13-18 месяцев	8	12	20
19-24 месяца	10	15	25
Всего	40	60	100

Как показано в приведенной таблице, в каждой возрастной группе количество мальчиков и девочек различается. Наибольшее количество детей сосредоточено в возрастной группе 7-12 месяцев.

Результаты общего анализа крови

Таблица 3: Результаты общего анализа крови мальчиков (средние значения).

Возрастная группа	**Лейкоциты (WBC)**	**Лимфоциты (%)**	**Эритроциты (RBC)**	**Гемоглобин (Hb)**	**Тромбоциты (PLT)**
3-6 месяцев	12.5	65	4.5	11.5	300
7-12 месяцев	11.8	60	4.7	12.0	310
13-18 месяцев	11.2	58	4.6	11.8	305
19-24 месяца	10.9	55	4.8	12.3	320

Таблица 4: Результаты общего анализа крови девочек (средние значения)

Возрастная группа	Лейкоциты (WBC)	Лимфоциты (%)	Эритроциты (RBC)	Гемоглобин (Hb)	Тромбоциты (PLT)
3-6 месяцев	12.8	66	4.4	11.3	290
7-12 месяцев	11.6	61	4.5	11.7	295
13-18 месяцев	11.3	59	4.6	11.9	300
19-24 месяца	11.0	56	4.7	12.1	310

ВЫВОДЫ

Из приведенных таблиц видно, что количество лимфоцитов различается по возрастным группам и полу. У мальчиков количество лимфоцитов несколько ниже, в то время как у девочек этот показатель выше. Результаты распределения детей по возрастным группам показывают, что наибольшее количество заболевших приходится на возрастную группу 7-12 месяцев. В этой возрастной группе дети могут быть не привиты или не завершили полный курс вакцинации. Кроме того, в этом возрасте иммунная система детей еще не полностью развита, что делает их более уязвимыми к коклюшу. Результаты исследования показывают, что девочки чаще страдают от коклюша. Более высокая восприимчивость девочек к заболеванию может быть объяснена рядом факторов, включая биологические различия, доступность программ вакцинации и социальные факторы. По сравнению с мальчиками, у девочек количество лимфоцитов выше. Результаты анализа крови показывают различия по возрасту и полу. У девочек количество лимфоцитов выше, что может быть связано с эффективностью их иммунной системы. Повышенное количество лимфоцитов свидетельствует о течении заболевания и реакции иммунной системы. Результаты исследования еще раз подтверждают важность вакцинации против коклюша. Расширение программ вакцинации и повышение доступности этих программ необходимо для снижения распространения заболевания. Вакцинация младенцев может защитить их от коклюша.

Использованные источники:

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АНАЛИЗ ЗАБОЛЕВАЕМОСТИ КОКЛЮШЕМ В ЗАВИСИМОСТИ ОТ ПОЛА И ВОЗРАСТА

Аннотоция: *В данном исследовании изучались дети, больные коклюшем, в широкой выборке, включающей 100 заболевших детей, из которых 60 девочек и 40 мальчиков в возрасте от 1 до 6 лет. Цель исследования заключалась в сравнении результатов общего анализа крови у детей, больных коклюшем, в зависимости от возраста и пола. Это сравнение имеет важное значение для понимания влияния заболевания на показатели крови в зависимости от возраста и пола, а также для разработки стратегий контроля и лечения болезни. Результаты подчеркивают важность мониторинга и управления заболеванием у девочек и мальчиков и предоставляют данные, подчеркивающие необходимость целенаправленных подходов. Исследование показывает, что для профилактики, усиления контроля и координации лечения необходимо учитывать возрастные и половые различия.*

Ключевые слова*: общий анализ крови, возраст, пол, исследование, анализ, контроль, стратегии лечения.*

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THE RELATIONSHIP BETWEEN WHOOPING COUGH INCIDENCE AND GENDER AND AGE

Abstract: *This study examines children diagnosed with whooping cough in a broad cohort, including 100 affected children, 60 of whom are girls and 40 boys, aged 1 to 6 years. The focus of the research is on comparing the complete blood count results of children with whooping cough based on age and gender. This comparison is essential to understand the disease's impact on blood test parameters depending on age and gender and to establish strategies for disease control and treatment. The findings highlight the importance of monitoring and managing the disease in girls and boys and provide data emphasizing targeted approaches. This study demonstrates that prevention, enhanced monitoring, and treatment strategies must consider gender- and age-specific differences.*

Keywords*: complete blood count, age, gender, research, analysis, control, treatment strategies.*

ВВЕДЕНИЕ

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Цель исследования: Изучение зависимости заболеваемости коклюшем от пола и возраста.

МАТЕРИАЛЫ И МЕТОДЫ ИССЛЕДОВАНИЯ

Для изучения зависимости заболеваемости коклюшем от пола и возраста были выбраны 100 детей в возрасте от 3 месяцев до 2 лет, которые проходили лечение в период с сентября 2023 года по февраль 2024 года. У всех детей были взяты результаты общего анализа крови, которые затем сравнивались по возрасту и полу. Дети были разделены на возрастные группы (3–6 месяцев, 7–12 месяцев, 13–18 месяцев, 19–24 месяца) с целью изучения уровня заболеваемости в зависимости от возраста. Среди обследованных 40 детей были мальчиками (40 %), а 60 – девочками (60 %). У данных пациентов проводились обследования и наблюдения. Исследование проводилось в отделении детских инфекционных заболеваний многопрофильной клиники Ташкентской медицинской академии.

РЕЗУЛЬТАТЫ

Распределение по полу

Таблица 1: Распределение детей, больных коклюшем, по полу.

Пол	**Количество**	**Процент (%)**
Мальчики	40	40%
Девочки	60	60%
Всего	100	100%

Из приведенной таблицы видно, что 40% детей, участвовавших в исследовании, были мальчиками, а 60% — девочками.

Распределение по возрасту

Таблица 2: Распределение детей, заболевших коклюшем, по возрасту.

Возрастная группа	Количество мальчиков	Количество девочек	Всего
3-6 месяцев	10	15	25
7-12 месяцев	12	18	30
13-18 месяцев	8	12	20
19-24 месяца	10	15	25
Всего	40	60	100

Как показано в приведенной таблице, в каждой возрастной группе количество мальчиков и девочек различается. Наибольшее количество детей сосредоточено в возрастной группе 7-12 месяцев.

Результаты общего анализа крови

Таблица 3: Результаты общего анализа крови мальчиков (средние значения).

Возрастная группа	**Лейкоциты (WBC)**	**Лимфоциты (%)**	**Эритроциты (RBC)**	**Гемоглобин (Hb)**	**Тромбоциты (PLT)**
3-6 месяцев	12.5	65	4.5	11.5	300
7-12 месяцев	11.8	60	4.7	12.0	310
13-18 месяцев	11.2	58	4.6	11.8	305

19-24 месяца	10.9	55	4.8	12.3	320

Таблица 4: Результаты общего анализа крови девочек (средние значения)

Возрастная группа	**Лейкоциты (WBC)**	**Лимфоциты (%)**	**Эритроциты (RBC)**	**Гемоглобин (Hb)**	**Тромбоциты (PLT)**
3-6 месяцев	12.8	66	4.4	11.3	290
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13-18 месяцев	11.3	59	4.6	11.9	300
19-24 месяца	11.0	56	4.7	12.1	310

ВЫВОДЫ

Из приведенных таблиц видно, что количество лимфоцитов различается по возрастным группам и полу. У мальчиков количество лимфоцитов несколько ниже, в то время как у девочек этот показатель выше. Результаты распределения детей по возрастным группам показывают, что наибольшее количество заболевших приходится на возрастную группу 7-12 месяцев. В этой возрастной группе дети могут быть не привиты или не завершили полный курс вакцинации. Кроме того, в этом возрасте иммунная система детей еще не полностью развита, что делает их более уязвимыми к коклюшу. Результаты исследования показывают, что девочки чаще страдают от коклюша. Более высокая восприимчивость девочек к заболеванию может быть объяснена рядом факторов, включая биологические различия, доступность программ вакцинации и социальные факторы. По сравнению с мальчиками, у девочек количество лимфоцитов выше. Результаты анализа крови показывают различия по возрасту и полу. У девочек количество лимфоцитов выше, что может быть связано с эффективностью их иммунной системы. Повышенное количество лимфоцитов свидетельствует о течении заболевания и реакции иммунной системы. Результаты исследования еще раз подтверждают важность вакцинации против коклюша. Расширение программ вакцинации и повышение доступности этих программ необходимо для снижения распространения заболевания. Вакцинация младенцев может защитить их от коклюша.

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ПУЛ МАБЛАҒЛАРИ ТУШУНЧАСИ БУХГАЛТЕРИЯ ҲИСОБИ ОБЪЕКТИ СИФАТИДА ТАВСИФИ

Аннотация. *Ушбу мақолада пул маблағлари ва эквивалентларини тан олиш, таърифини халқаро стандартларга мувофиқлаштиришдаги долзарб муаммолар қайд қилинган. Пул маблағлари бўйича муаллифлик таърифи ишлаб чиқилди. Хорижий тажрибалардан келиб чиқиб пул маблағлари ва пул эквивалентлари таркибини такомиллаштириш бўйича таклифлар ишлаб чиқилди. Бугунги кунда пул маблағлари ҳисобини такомиллаштиришнинг асосий йўналишлари таклиф этилди.*
Калитли сўзлар: *пул маблағлари, пул эквивалентлари, операцион фаолият, инвестициявий фаолият, молиявий фаолият, кичик касса.*

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DESCRIPTION OF THE CONCEPT OF CASH AS AN ACCOUNTING OBJECT

Abstract. *This article highlights the current problems of recognizing cash and cash equivalents and aligning their definition with international standards. An author's definition of cash has been developed. Based on foreign experience, proposals have been made to improve the structure of cash and cash equivalents. The main directions of improving cash accounting today have been proposed.*
Keywords: *cash, cash equivalents, operating activities, investment activities, financial activities, petty cash*

Пул маблағлари бухгалтерия ҳисобининг муҳим объекти ҳисобланади. Ушбу объектни тавсифлаш, унинг характерли хусусиятларини очиб бериш, унинг таркибини шакллантириш ҳамда халқаро стандартларга мувофиқлаштириш ўта муҳим аҳамият касб этади. Бугунги кунда пул маблағлари ҳисобида унинг таърифини ишлаб чиқиш, халқаро стандартларга мувофиқ келадиган таснифини шакллантириш, касса ва унинг назоратини ташкил қилиш, кичик касса тушунчасини ва ундан фойдаланишни амалиётимизга жорий этиш, банкдаги депозит счётлардаги пул маблағлари ҳисобини халқаро стандартлар асосида ташкил этиш, пул оқими тўғрисидаги ҳисоботни тузишда илғор хорижий тажрибалардан фойдаланиш каби масалалар долзарб масалаларҳисобланади.

Пул маблағларига берган таърифларни ўрганиб чиқамиз.

Н.А. Галеева “Пул маблағлари – бу ташкилотнинг молиявий русурслари бўлиб, ҳар қндай даражадаги ва турдаги мажбуриятларнинг бажарилишини таъминлашда энг юқори ликвидли актив. Унинг етарли даражада мавжудлиги корхоналарнинг кредиторлик қарзларини ўз вақтида сўндирилишини таъмин этади”[66] деб тавсифлайди

Е.Ю.Омельчинки ва бошқалар “Таъкидлаш лозимки, “пул маблағлари” нафақат нақд, балким қимматли қоғозлар, ва молиявий активлар, ва пул мажбуриятларни ўзи ичига олади, маблағнинг ўзи эса капитал сифатида трактовка қилинади. Пул маблағлари балансда “Пул маблағлари ва уларнинг эквивалантлари” моддасида оборот маблағлари таркибида акс эттиради.”[67] деб таъкидлашган.

О.А. Воликов, Н.Ю.Помыткина “Ташкилотнинг пул маблағлари – корхона кассасидаги нақд, банкдаги лицевой счётлардаги пуллар, шунингдек нақдлаштирилмаган кўринишдаги қимматбаҳо қағозлар”[68] деб тавсифлайди.

Т.Н.Кокина “Замонавий шароитда пул маблағлари ўз пуллари билан бир қаторда йўлдаги пул маблағлари; ташкилотнинг пул маблағлари кўринишидаги пул капитали ва бошқа пул эквивалентлари шундай қисқа муддатли инвестицияларнинг элементларни қамраб оладики, қайсики бир қанча шароитларда улар характери бўйичапул маблағларига тенглаштирилади; юқоридагилардан ташқари монетар (пул) активлари, қайсики бюджет билан ва бюджетдан ташқари фондлар билан ҳисоб-китобларга алоқадор бошқа қисқа муддатли молиявий қуйилмаларни ўз ичига олади.”[69]

Тадқиқотчи Б.Боронов молиявий активларнинг таркибий қисмларини халқаро стандартлар талаблари асосида қуйидаги расмда акс эттиради (1-расмга қаранг).

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1-расм. Молиявий активларнинг таркиби[70]

Ушбу расмдан кўриниб турибдики, пул маблағлари молиявий активнинг энг асосий элементи ҳисобланади.

Жорий активлар таркибида муҳим моддалардан бири пул маблағлари ҳисобланади. Халқаро стандартларда жорий активларнинг учта тури кўрсатилган. *Биринчисига*, бизнес субъектининг нормал операцион цикли давомида олинган ва истеъмол қилинган айланма капиталнинг бир қисми киритилган. *Иккинчисига*, операцион актив ҳисобланмаган, балки савдо ва инвестицион мақсадларда қўлланилиб, ҳисобот санасидан 12 ой давомида сотишга мўлжалланган маблағлар қайд қилинган. У*чинчи* турига пул маблағлари ва уларнинг эквивалентлари, қайсики фойдаланишда тўсиқларга эга бўлмаган маблағлар киритилган.

Пул маблағлари ҳам жорий маблағларда катта ҳиссани ташкил этадиган тезкор ликвидли актив ҳисобланади ва бутун бизнесни ҳаракатлантирувчи восита сифатида майдонга чиқади. Ҳозирги кунда пул маблағларининг ҳолати ва ҳаракатига доир сифатли ҳамда объектив ахборотларни шакллантиришда уларнинг ҳисоби ва ҳисоботини бухгалтерия ҳисоби миллий ва халқаро стандартлари талабларига мувофиқлаштириш муҳим аҳамият касб этади. Пул маблағлари ҳисобининг асосий масалалари бўлиб бўлиб пул маблағлари тавсифи, таркиби, ҳисобга олиш усуллари ва ҳисоботи бўлиб ҳисобланади.

9-сон БҲМС “Пул оқими тўғрисидаги ҳисобот” миллий стандартда пул маблағлари, пул эквивалентлари ва пул оқимлари тушунчаларига қуйидагича таъриф берилган:

“Пул маблағлари - кассадаги нақд пул ва талаб қилиб олинадиган депозитлар, шунингдек банкнинг ҳисоб-китоб, валюта ва бошқа счётларидаги маблағлар. Пул эквивалентлари - маълум пул маблағига тез ва осон

[70] Б.Боронов. Корхоналар молиявий активлари ҳисобини такомиллаштириш. PhD илмий унвонини олиш учун ёзилган диссертация. Тошкент 2020 й. 42-б.

алмаштириладиган ҳамда қийматидаги ўзгаришлар туфайли унча кўп бўлган қисқа муддатли, юқори ликвидли инвестициялар (молиявий қўйилмалар). Пул оқимлари — пул маблағлари ҳамда улар эквивалентларининг оқими (тушуми) ва чиқими (сарфланиши, чиқиши)дан иборат.”

Стандартда қўйидаги атамаларга таъриф берилган (7-сон МҲХС. 6§):

Пул маблағлари – бу компаниянинг кассаси ва жорий счётларидаги пулларидан ташкил топади.

Пул маблағлари эквиваленти – қисқа муддатли, пул маблағларининг олдиндан маълум бўлган суммасига тез айланадиган ва қиймати ўзгариши салмоқли бўлмаган рискка тортиладаиган тез ликвидли қуйилмалардир.

Юқоридаги таърифларни тадқиқ қилиш асосида хулоса қилиш мумкинки, пул маблағларига берилган ягона таъриф мавжуд эмас. Барча таърифларда пул маблағлари деганда кассада ва банкдаги депозит счётлардаги пуллар тушунилиши таъкидланган. Айрим таърифларда унинг энг муҳим хусусиятлари фойдаланишда ҳеч қандай тўсиққа эга эмаслиги, тез ликвидли актив эканлиги, молиявий активлар такрибига кириши, харид қилинган товарлар, ишлар ва хизматлар учун тўлов воситаси эканлиги таъкидланган. Юқоридаги таърифларда келтирилган ижобий жиҳатларини ҳисобга олиб пул маблағларига қуйидагича таърифни берамиз:

“**Пул маблағлари** деганда, молиявий актив ҳисобланган ўта тез ликвидли жорий актив бўлиб, харид қилинган товарлар (маҳсулотлар, иш ва хизматлар) ва бошқа мажбуриятлар учун ҳеч қандай тўсиқларсиз тўлов воситасини бажарувчи накд ва ва талаб қилиб олинадиган депозит счётлар, шунингдек банкнинг ҳисоб-китоб, валюта ва бошқа счётларидаги пуллар ҳамда депозитсиз инструментлар, жумладан чеклар ва пул ордерларига айтилади.”[71]

21-сон БҲМСда пул маблағларини уларнинг қаерда жойлашишига (банкдаги хисоб-рақамлари ёки корхона кассасида) қараб валюта турлари бўйича таснифланган: 1) кассадаги пул маблағлари; 2) ҳисоб-китоб счётидаги пул маблағлари; 3) чет эл валютасидаги счётлардаги пул маблағлари; 4) банкдаги махсус счётлардаги пул маблағлари; 5) пул эквивалентлари; 6) йўлдаги пул маблағлари.

Ушбу фикрлардан кўриниб турибдики, мамлакатимиз олимлари томонидан пул маблағлари, уларнинг эквивалентлари моҳияти ва таркибий қисмлари кўрсатиб берилган. Лекин, уларни классификациялашнинг белгилари ва таркибий қисмлари тўлиқ ишлаб чиқилган, деб бўлмайди.

Халқаро тажрибаларда пул маблағлари ва эквивалентларининг таърифини беришга уринишлар кам. Асосий эътибор уларнинг таркибий қисмларини белгилашга қаратилган. Биз тадқиқот натижалари бўйича чет эл ва мамлакатимиздаги тажрибаларни ўрганиш асосида пул маблағлари ва уларнинг эквивалентларининг амалдаги таснифини маълум бир белгилари бўйича тизимлаштирамиз:

[71] Тадқиқотлар асосида муаллиф таърифи

Пул маблағларининг таркибидаги элементлари бўйича: 1) банкдаги депозит счётлардаги қолдиқлар; 2) нақд купюралар ва тангалар; 3) чеклар; 4) пластик карточкалардаги маблағлар; 5) банк драфтлари; 6) пул ордерлари; 7) депозит сертификатлари.

Пул маблағларининг банкда ёки корхонада жойлашганлигига қараб: 1) Корхона бош кассаси (миллий валютадаги касса, чет эл валютасидаги касса); 2) Операцион касса (савдо дўконлари ва бошка объектлардаги касса); 3) банкдаги ҳисоб-китоб счёти (миллий валютадаги ҳисоб-китоб счёти, чет эл валютасидаги ҳисоб-китоб счёти, махсус счётлардаги пул маблағлари); 4) йўлдаги пул маблағлари (инкассаторлар, кечки касса, алоқа бўлимлари).

Пул маблағларининг мамлакат ичкарисида ёки ташқарисида жойлашганлигига қараб: 1) мамлакат ичкарисидаги пул маблағлари (мамлакат ичидаги касса ва банкдаги ҳисоб-китоб счётлари); 2) Мамлакат ташқарисидаги пул маблағлари (чет элдаги валюта счётлари).

Валюта турига қараб: 1) Ўзбекистон миллий валютасидаги пул маблағлари (банкда ва кассада «сўм»даги пул маблағлари); 2) Чет эл валютасидаги пул маблағлари (хорижий банклардаги пул маблағлари).

Ушбу таснифланишга мувофиқ йўлдаги пул маблағларини банкдаги пул маблағларининг таркибида ҳисобга олиш мақсадга мувофиқдир. Чунки, ҳозирги кунда пулни инкассация қилиш тартибининг такомиллашуви, ҳужжатларга ишлов беришнинг компьютер тизимига ўтилиши ва технологик жараёнларнинг тезлашуви йўлдаги пул маблағларининг асосий счётларга етиб боришини тезлаштирмокда. Бундан ташқари пул маблағлари инкассаторларга топширилгандан сўнг тўлиқ жавобгарлик банклар зиммасига ўтказилиши керак.   Ушбу таснифланишга мувофиқ йўлдаги пул маблағларини пул маблағларининг таркибида ҳисобга олиш мақсадга мувофиқдир. Чунки, ҳозирги кунда пулни инкассация қилиш тартибининг такомиллашуви, ҳужжатларга ишлов беришнинг компьютер тизимига ўтилиши ва технологик жараёнларнинг тезлашуви йўлдаги пул маблағларининг асосий счётларга етиб боришини тезлаштирмокда. Биз чет эл ва мамлакатимиздаги тажрибаларни ўрганиш асосида пул маблағлари ва уларнинг эквивалентларининг амалдаги таснифини маълум бир белгилари бўйича тизимлаштирамиз:

Пул маблағларининг банкда ёки корхонада жойлашганлигига қараб: 1) Корхона бош кассаси (миллий валютадаги касса, чет эл валютасидаги касса); 2) Операцион касса (савдо дўконлари ва бошка объектлардаги касса); 3) банкдаги ҳисоб-китоб счёти (миллий валютадаги ҳисоб-китоб счёти, чет эл валютасидаги ҳисоб-китоб счёти, махсус счётлардаги пул маблағлари); 4) йўлдаги пул маблағлари (инкассаторлар, кечки касса, алоқа бўлимлари).

Пул маблағларининг мамлакат ичкарисида ёки ташқарисида жойлашганлигига қараб: 1) мамлакат ичкарисидаги пул маблағлари (мамлакат ичидаги касса ва банкдаги ҳисоб-китоб счётлари); 2) Мамлакат ташқарисидаги пул маблағлари (чет элдаги валюта счётлари).

Моддий ва номоддийлигига қараб: нақд пуллар ва электрон пуллар. Электрон пуллар – кредит муассаси томонидан чиқарилган, компьютер хотирасида маълумот кўринишида тақдим этилган, ҳам тўлов воситаси, ҳам муомала воситаси вазифасини, шунингдек пулнинг бошқа функцияларини бажарадиган ва барча имкониятларга эга бўлган банкноталаридир.

Ушбу таснифланишга мувофиқ йўлдаги пул маблағларини банкдаги пул маблағларининг таркибида ҳисобга олиш мақсадга мувофиқдир. Чунки, ҳозирги кунда пулни инкассация қилиш тартибининг такомиллашуви, ҳужжатларга ишлов беришнинг компьютер тизимига ўтилиши ва технологик жараёнларнинг тезлашуви йўлдаги пул маблағларининг асосий счётларга етиб боришини тезлаштирмокда. Бундан ташқари пул маблағлари инкассаторларга топширилгандан сўнг тўлиқ жавобгарлик банклар зиммасига ўтказилиши керак.

Хулоса қиладиган бўлсак, пул маблағларига берилган таъриф халқаро стандартларга мувофиқ келади. Пул маблағларининг таснифини такомиллаштириш бўйича берилган таклифлар пул маблағлари ҳисобини халқаро стандартларга мувофиқлаштиришга хизмат қилади.

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МУЗЕЕВЕДЕНИЕ - ВАЖНОЕ СРЕДСТВО ПРОПАГАНДЫ НАЦИОНАЛЬНОЙ ДУХОВНОСТИ И ИСТОРИИ

Аннотация. *В статье рассматриваются достижения Узбекистана в области музееведения в годы независимости и реформы, проведенные в этот период. Особое внимание уделено созданию новых музеев, направленных на сохранение и развитие национального культурного наследия, модернизации существующих музеев, расширению международного сотрудничества и внедрению современных технологий. Также анализируются проблемы и перспективы развития данной отрасли.*

Ключевые слова: *Узбекистан, независимость, музееведение, культурное наследие, национальная идентичность, международное сотрудничество, модернизация, технологии.*

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MUSEUM STUDIES ARE AN IMPORTANT MEANS OF PROPAGANDA OF NATIONAL SPIRITUALITY AND HISTORY

Abstract. *This article explores Uzbekistan's achievements in the field of museology during its years of independence and the reforms implemented in this period. It focuses on the establishment of new museums aimed at preserving and developing national cultural heritage, the modernization of existing museums, the expansion of international cooperation, and the introduction of modern technologies. The paper also discusses challenges and prospects for the development of this field.*

Keywords: *Uzbekistan, independence, museology, cultural heritage, national identity, international cooperation, modernization, technologies.*

Музеи являются важными местами сохранения и передачи исторического, культурного и научного наследия каждой страны. Достижения Узбекистана в этой области за годы независимости служат реализации национальной самобытности, сохранению культурного наследия и популяризации его во всем мире. Музеи являются не только местом демонстрации образцов истории и искусства, но и играют особую роль в воспитании молодого поколения, проведении научных исследований и формировании национальной идентичности. После обретения независимости в 1991 году Узбекистан разработал новый подход к своему культурному наследию. Область музееведения стала одним из важных направлений государственной политики. С первых лет независимости создание новых музеев, модернизация существующих музеев, расширение международного сотрудничества и внедрение цифровых технологий стали основными факторами развития этой сферы.

В данной статье рассматриваются этапы развития музееведения в Узбекистане в период с 1991 по 2021 годы, достижения, существующие проблемы и перспективы. Таким образом, анализируются усилия Узбекистана в годы независимости по сохранению культурного наследия и продвижению его на международной арене. Независимость Узбекистана (1991 г.) положила начало новой эпохе в плане осознания национальной идентичности, восстановления исторической памяти и сохранения культурного наследия. В этот период область музееведения стала важным средством пропаганды национальной духовности и истории.

Сохранение и популяризация культурного наследия были определены как один из приоритетов государственной политики. Реорганизация музейной деятельности в первые годы независимости работающие в стране музеи пользовались поддержкой государства. В то время основное внимание было сосредоточено на следующих направлениях:

• Увеличение национального содержания музеев: во времена бывшего Союза многие музеи освещали темы международного или регионального значения, но после обретения независимости они сосредоточились на отображении национальной истории и культурного богатства Узбекистана.

• Укрепление материально-технической базы: В первые годы многие музеи не имели достаточной материальной базы. Поэтому государством разработаны специальные программы поддержки их деятельности.

• Обучение кадров: Из-за нехватки высококвалифицированных специалистов для работы в музеях особое внимание уделялось подготовке кадров и повышению их квалификации в этой области. Создание новых музеев В первые годы независимости был открыт ряд новых музеев, посвященных памяти исторических событий и личностей. Включая:

• Музей Амира Темура (1996 г.): Этот музей, созданный в Ташкенте в ознаменование 660-летия со дня рождения Амира Темура, стал одним из величайших достижений музееведения в период независимости. Музей приобрел большое значение в развитии национального самосознания и исторического сознания молодого поколения.

• Филиалы Государственного художественного музея Узбекистана: В первые годы независимости Республики Каракалпакстан музей имени Савицкого стал превращаться в культурный центр международного значения. Национальное направление музееведения. В первые годы независимости начался процесс реорганизации деятельности музеев по национальному направлению. В ходе этого процесса:

• Уделялось внимание сбору и сохранению экспонатов, связанных с историей и культурой Узбекистана.

• Организованы выставки, посвященные национальным героям, историческим личностям и восстановлению национальной идентичности.

• Создавались новые экспозиции по темам, которым в советское время не придавалось значения, а иногда и ограничивалось. Начало международного сотрудничества С 1991 года, когда Узбекистан установил активные связи с мировым сообществом, область музееведения также вышла на международную арену. Многие проекты реализованы в рамках сотрудничества с ЮНЕСКО и другими международными организациями. При этом некоторые исторические памятники и экспонаты были восстановлены с помощью иностранных специалистов и инвестиций.

Первые годы независимости создали важную основу для развития музееведения. Музеи были реорганизованы как основные центры осознания национальной идентичности, восстановления истории и сохранения культуры. Внимание, проявленное государством в этой области, явилось одним из главных достижений в годы независимости и создало основу для дальнейшего развития музейной деятельности в последующие периоды. Открытие новых музеев В 1991-2021 годах в Узбекистане были созданы новые музеи. Включая:

• Государственный музей истории Тимуридов (1996 г.): Был создан специальный музей для изучения истории Амира Темура и периода Тимуридов.

• Филиалы Государственного художественного музея: музей имени Савицкого стал центром, привлекающим международное внимание.

• Музеи национальных археологических и исторических памятников: открыто множество новых филиалов в городах Хива, Бухара и Самарканд. Технологическое обновление и модернизация Большое внимание уделялось технологическому обновлению в музеях. С начала 2000-х годов в музеях внедряются мультимедийные технологии.

В годы независимости Узбекистан уделял внимание развитию международного сотрудничества в области музееведения. В этом процессе музеи Узбекистана активно участвовали в международных форумах и выставках. Музей Савицкого в Нукусе стал известен как «Лувр пустыни» в сотрудничестве с ЮНЕСКО. Также в рамках совместных проектов с зарубежными странами отремонтировано множество исторических экспонатов и проведены международные научные исследования. Для развития музееведения важным стал вопрос подготовки кадров. В годы независимости в таких высших учебных заведениях, как Ташкентский государственный институт культуры и искусства, Ташкентский государственный университет востоковедения, были открыты специальные курсы по музееведению. Это вывело качество подготовки специалистов на новый уровень.

Также значительный прогресс достигнут в таких областях, как подготовка кадров, сохранение и оцифровка музейных экспонатов. Однако следует признать, что существуют проблемы в развитии музееведения, такие как укрепление материально-технической базы, повышение квалификации кадров, создание современных условий в некоторых музеях. При этом совместные усилия государства и общества позволят устранить эти проблемы и вывести отрасль на новый уровень. Достижения Узбекистана в области музееведения имеют большое значение в развитии национального самосознания, в воспитании молодого поколения как исторически сознательных и духовно зрелых личностей. В будущем перспективы дальнейшего развития музееведения открываются за счет цифровизации, расширения международных связей, использования современных технологий. Этот процесс важен для сохранения культурного наследия страны и передачи его будущим поколениям.

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ИНФОРМАЦИОННЫЕ И КОММУНИКАТИВНЫЕ ТЕХНОЛОГИИ

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РАЗРАБОТКА ИНФОРМАЦИОННОЙ СИСТЕМЫ ДЛЯ КАФЕ

Аннотация: *статья посвящена разработке информационной системы для автоматизации бизнес-процессов кафе. Описаны функции системы, такие как оформление заказов, управление меню, обработка стоп-листов, тестирование сотрудников и анализ отчетности. Предложенные решения направлены на повышение эффективности и конкурентоспособности заведения.*

Ключевые слова*: информационная система, автоматизация, кафе, управление заказами, бизнес-процессы.*

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DEVELOPMENT OF AN INFORMATION SYSTEM FOR CAFES

Abstract: *the article is devoted to the development of an information system for automating cafe business processes. The system's functions are described, such as order processing, menu management, stop list processing, employee testing, and* *reporting analysis. The proposed solutions are aimed at improving the efficiency and competitiveness of the institution.*

***Keywords**: information system, automation, cafe, order management, business processes.*

Актуальность темы разработки информационной системы для кафе-пекарни обусловлена растущей цифровизацией бизнеса и высокими требованиями к качеству обслуживания клиентов. В условиях высокой конкуренции в сфере общественного питания автоматизация ключевых процессов, таких как оформление заказов, управление меню, учет данных сотрудников и взаимодействие с клиентами, становится необходимым условием для повышения эффективности и конкурентоспособности.

Современные потребители ожидают удобных и доступных цифровых решений, включая онлайн-сервисы, мобильные приложения и программы лояльности. Интеграция информационной системы с такими технологиями позволяет оптимизировать внутренние процессы, снизить издержки, ускорить обслуживание и улучшить клиентский опыт.

Внедрение подобной системы способствует реализации принципов цифровой экономики, упрощает управление бизнесом и открывает новые возможности для анализа данных и масштабирования. Это делает тему разработки информационной системы для кафе-пекарни значимой как для малого и среднего бизнеса, так и для улучшения отраслевых стандартов в целом [1].

Создание страницы формирования заказа обеспечит удобный интерфейс для реализации ключевого процесса данной предметной области – создание нового заказа. Для работы с данными из базы данных, привязанной к проекту, использован элемент DataGrid. Привязка столбцов DataGrid к сущности базы данных осуществлялась через оператор Binding [2-4]. К коде XAML страницы добавлялся участок *Binding="{Binding Название_столбца}"*. Таким образом для формирования заказа можно легко оперировать данными из базы данных. Страница для формирования заказа представлена на рисунке 1.

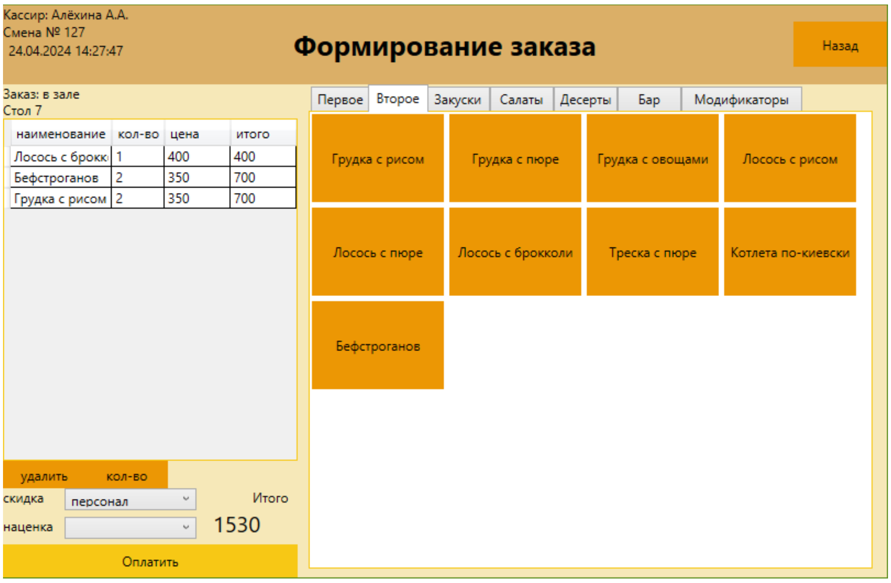

Рисунок 1 – Страница формирования заказа

Для корректной работы системы необходимо создать страницу оплаты заказа. На этой странице будут отображаться сумма заказа, способы оплаты и представлен интерфейс для дробления оплаты. Пользователи смогут оплачивать заказ наличными средствами или производить безналичный расчет, а также разделить оплату и провести часть денег через электронный терминал, а оставшуюся сумму выплатить наличными средствами (рисунок 2).

Рисунок 2 – Страница оплаты заказа

Создана страница «Стоп-лист», благодаря которой кассир сможет добавить ограниченные блюда в стоп-лист и убирать их по мере снятия блюд с ограничения. Это позволит кассирам избежать ошибок при формировании заказов, а повара получат гарантию того, что для кухни не выбьют заказ на блюдо, содержащее отсутствующие у повара ингредиенты (рисунок 3).

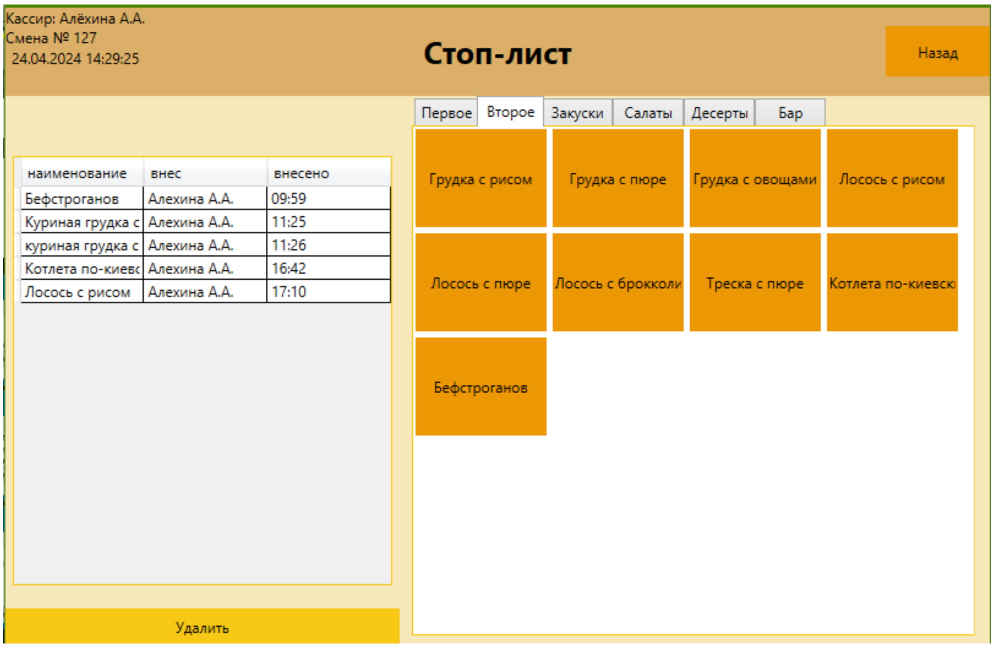

Рисунок 3 – Страница добавления блюд в стоп-лист

Чтобы контрольные точки для стажеров не отнимали рабочее время у администратора или управляющего заведения, а требования к знаниям стажирующегося были четко обозначены в системе размещен блок для тестирования работников. Стажеры смогут пройти тестирование и в случае, если они наберут достаточное количество баллов, то стажировка будет считаться успешно пройденной и стажер будет официально трудоустроен. Так же данный блок может пригодиться сотрудникам заведения, которым необходимо подтвердить уровень квалификации. Все более широкое применение на предприятиях общественного питания различного автоматического отечественного и импортного оборудования нового поколения обусловливает востребованность отрасли в высококвалифицированных специалистах. Страница с тестовым блоком представлена на рисунке 4.

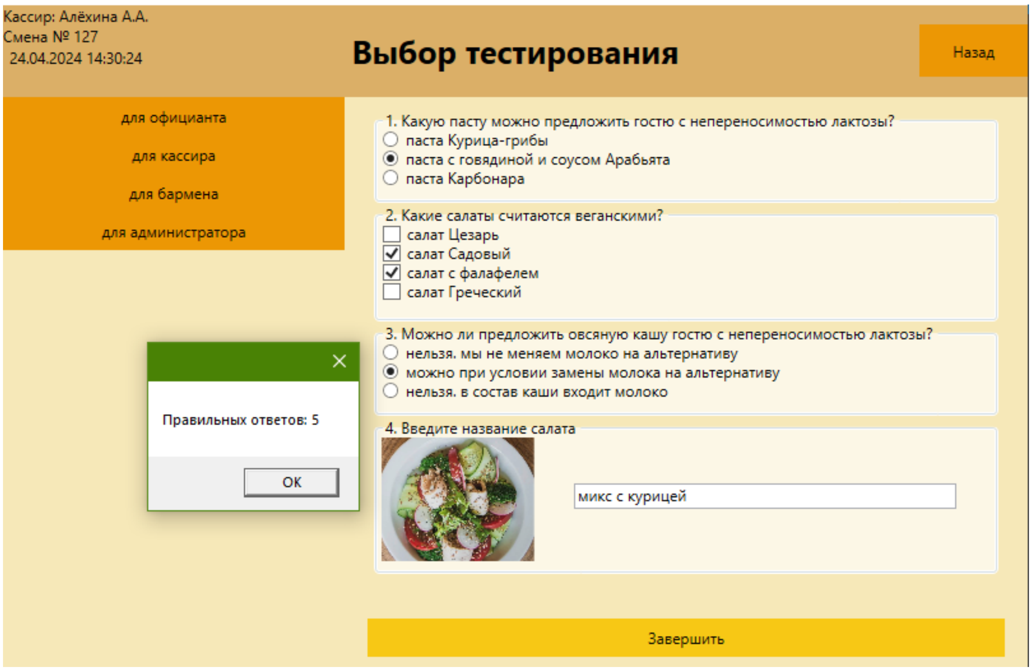

Рисунок 4 – Страница для проведения тестирования сотрудников

Стратегическое планирование поможет начальству своевременно и в нужной степени вносить изменения в работу заведения. Необходимо уметь грамотно распределить ресурсы, построить бизнес-стратегию, приспособленную к окружению организации, эффективно контролировать внутренние операции, отслеживая сильные и слабые стороны организации, учиться на прошлых стратегических решениях и ошибках.

Чтобы администратор мог контролировать закупки и корректировать накладные для следующих поставок ему необходимо иметь четкое представление о расходе продуктов. С этим ему может помочь анализ блюд, которые чаще всего добавляются в ограничения. Большинство запасов заведения являются скоропортящимися и требуют особы условий хранения и проведения оперативной процедуры списания при порче, по многим видам продуктов производится формирование промежуточных полуфабрикатов, что следует оперативно учитывать для обеспечения высокого качества кухни и уменьшения затрат на закупку сырья.

На продукты питания изготовитель (исполнитель) обязан устанавливать срок годности - период, по истечении которого товар считается непригодным для использования по назначению. Вред, причиненный жизни, здоровью или имуществу потребителя вследствие необеспечения безопасности товара, подлежит возмещению в соответствии со статьей 14 Закона О защите прав потребителей: Федеральный закон № 2300-1.

С целью обеспечения контроля закупок, поддержания качества кухни на достойном уровне и обеспечения соответствия федеральным законам в системе необходимо реализовать раздел с отчетной документацией для анализа нынешнего устройства дел в заведении общественного питания. Для автоматизации анализа стоп-листа на странице с отчетами размещен блок «Анализ стоп-листа» (рисунок 5).

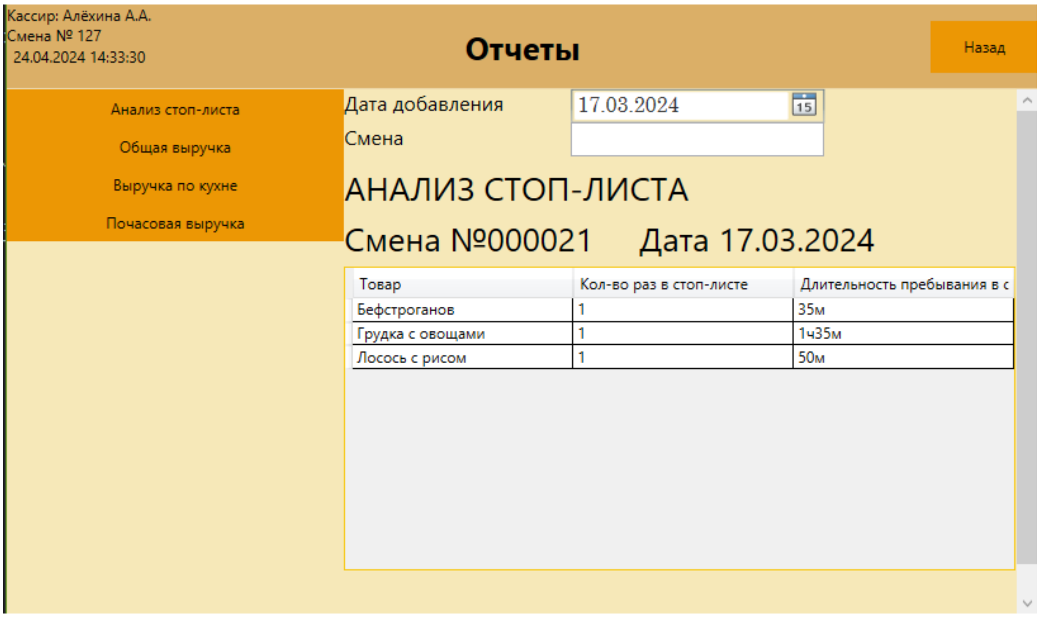

Рисунок 5 – Отчет об анализе стоп-листа

Экономическая деятельность характеризуется тем, что она требует затрат на производство, продажу, организацию обслуживания, которые возмещает за счет доходов, и предполагает получение прибыли. Таким образом, предприятия отрасли созданы и функционируют для реализации главной цели системы общественного питания.

Для анализа бизнес-процессов организации общественного питания наиболее часто обращают внимание на показатели максимального выпуска блюд за единицу времени, максимальное количество гостей, которое может обслужить заведение в смену, изменения в составе предприятия и пр. Основную часть этих показателей позволяет отследить отчет о почасовой выручке.

Помимо других отчетов в системе можно посмотреть почасовую выручку за текущую смену. Это поможет при прогнозировании и анализе бизнес-процессов. Таким образом могут быть выявлены периоды, когда выручка резко растет или, например, в какое время она падает. Благодаря этому администратор может скорректировать время приготовления заготовок на кухне и баре, чтобы снизить количество ингредиентов, которые попадают в отходы из-за того, что повара не смогли вовремя их использовать (рисунок 6).

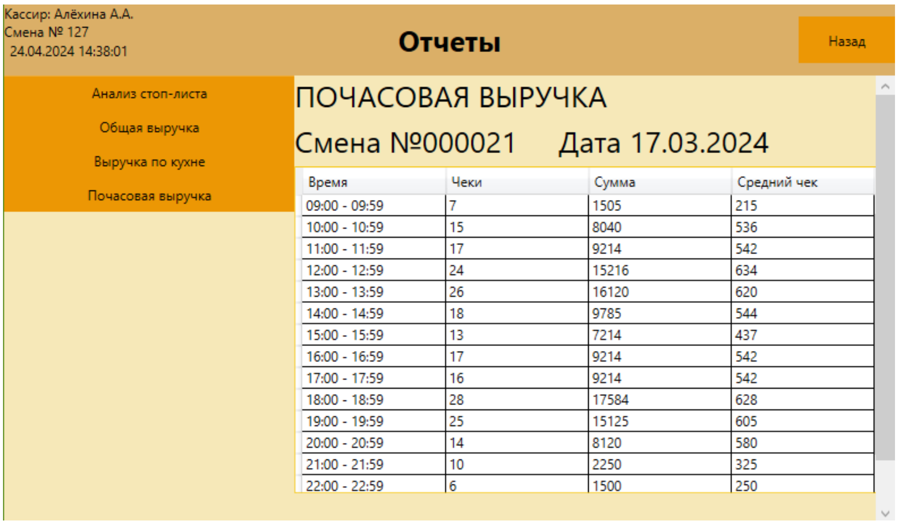

Рисунок 6 – Отчет о почасовой выручке

Разработанная информационная система автоматизирует ключевые процессы кафе, включая оформление заказов, управление меню и учет данных сотрудников, что значительно упрощает повседневную работу заведения.

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ПОСТРОЕНИЕ МАТЕМАТИЧЕСКОЙ МОДЕЛИ ИЗГИБА СТЕРЖНЯ

Аннотация:В данном статье разрабатывается математическая модель для расчета изгиба прямоугольного поперечного сечения стержня (W) на основе вариационного принципа Лагранжа, получается точное решение рассматриваемой краевой задачи, описывается вычислительный алгоритм и проводится сравнительный анализ результатов [1-3].

Ключевые слова *Вариационной принцип, потенциальной энергия, внешний сил, моменты, напряжение, модуль упругости, деформация, конечных разностей, метод прогонки.*

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CONSTRUCTION OF A MATHEMATICAL MODEL OF ROD BENDING

Abstract:In this article develops a mathematical model for calculating the bending of a rectangular cross-section of a rod based on the Lagrange variational principle, obtains an exact solution to the considered boundary value problem under consideration, describes the computational algorithm and performs a comparative analysis of the results [1-3].

Keywords:Variational principle, potential energy, external forces, moments, stress, elastic modulus, deformation, finite differences, sweep method.*

Постановка задачи:

В данной постановке математическая модель перемещения точек стержня и компонента деформаций составляет [3-6]

$$u=-z\alpha_1 \text{ или } u=-z\frac{\partial w}{\partial x}, \qquad (1)$$

$$\varepsilon=\frac{\partial u}{\partial x}=\frac{\partial}{\partial x}\left(-z\frac{\partial w}{\partial x}\right)=-z\frac{\partial^2 w}{\partial x^2}. \qquad (2)$$

Из закона Гука определяем напряжение:

$$\sigma=E\varepsilon=E\left(-z\frac{\partial^2 w}{\partial x^2}\right)=-Ez\frac{\partial^2 w}{\partial x^2}, \qquad (3)$$

где σ – напряжение; E – модуль упругости; ε – деформация.

Для вывода дифференциальных уравнений равновесия стержней используется вариационный принцип Лагранжа [1-10].

$$\delta(-\Pi+A)=0 \qquad (4)$$

Теперь на основе вариационного принципа Лагранжа (4) вычисляем вариации потенциальной энергии:

$$\delta\Pi=\int_V \sigma\delta\varepsilon dV=\int_V \sigma\delta\left(-z\frac{\partial^2 w}{\partial x^2}\right)dV=\int_x\left[-\int_F z\sigma dF\delta\left(\frac{\partial^2 w}{\partial x^2}\right)\right]dx. \qquad (5)$$

Момент силы M определяется в виде:

$$M=\int_F z\sigma dF=\int_F -Ez^2\frac{\partial^2 w}{\partial x^2}dF=-E\frac{bh^3}{12}\frac{\partial^2 w}{\partial x^2}=-EJ\frac{\partial^2 w}{\partial x^2}. \qquad (6)$$

Подставим выражение M на формуле (5), и интегрируем его по частям:

$$\int_x\left[-\int_F z\sigma dF\delta\frac{\partial^2 w}{\partial x^2}\right]dx=\int_x\left[-M\delta\frac{\partial^2 w}{\partial x^2}\right]dx=-M\delta\frac{\partial w}{\partial x}\bigg|_x-\int_x\left[\frac{\partial M}{\partial x}\delta\frac{\partial w}{\partial x}\right]dx=$$
$$=-M\delta\frac{\partial w}{\partial x}\bigg|_x+\frac{\partial M}{\partial x}\delta w\bigg|_x-\int_x\left[\frac{\partial^2 M}{\partial x^2}\delta w\right]dx. \qquad (7)$$

Тогда вариация потенциальной энергии имеет вид:

$$\delta\Pi=\left[-M\delta\frac{\partial w}{\partial x}+Q\delta w\right]_x-\int_x\left[\frac{\partial^2 M}{\partial x^2}\delta w\right]dx \qquad (8)$$

или

$$\delta\Pi=EJ\frac{\partial^2 w}{\partial x^2}\delta\frac{\partial w}{\partial x}\bigg|_x-EJ\frac{\partial^3 w}{\partial x^3}\delta w\bigg|_x+\int_x\left[EJ\frac{\partial^4 M}{\partial x^4}\delta w\right]dx. \qquad (9)$$

Теперь определяем вариации внешних сил δA:

$$\delta A=\int_x\int_l f\delta w\,dl\,dx=\int_x f\delta w\int_{-\frac{b_0}{2}}^{\frac{b_0}{2}}dy\,dx=\int_x fb_0\delta w\,dx. \qquad (10)$$

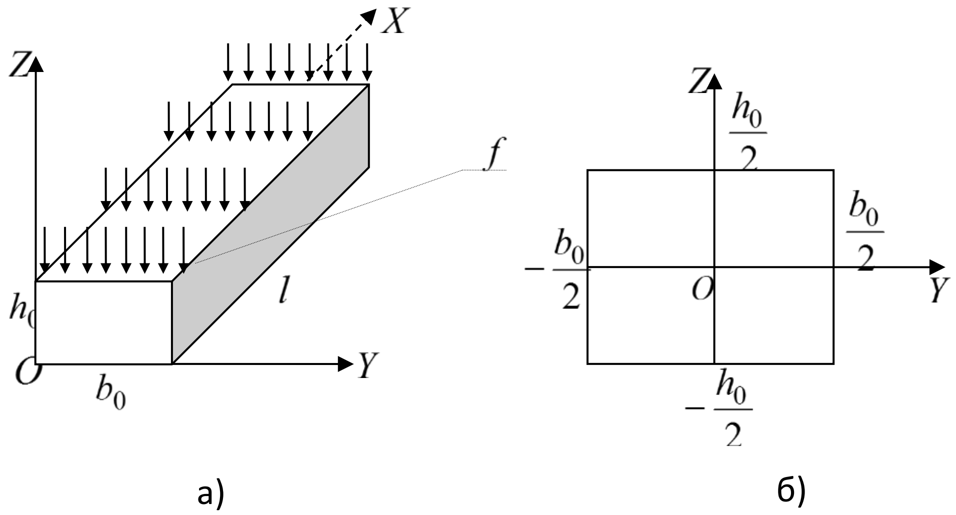

Рис. 1. Схема нагружения стержня на изгиб

На основе вариационного принципа Лагранжа (4) получим:

$$\int_x \left[-EJ\frac{\partial^4 w}{\partial x^4} + fb_0 \right] \delta w dx = 0. \qquad (11)$$

Введя в уравнение (11), безразмерные величины по зависимостям $x = l\overline{x}$ $w = h_0 \overline{w}$ имеем:

$$-\frac{EJh_0}{l^4}\frac{\partial^4 \overline{w}}{\partial \overline{x}^4} + fb_0 = 0 \quad \text{или} \quad \frac{\partial^4 \overline{w}}{\partial \overline{x}^4} = \frac{fb_0 l^4}{EJh_0}. \qquad (12)$$

Известно, что изгиб стержня вычисляется с помощью дифференциального уравнения четвертого порядка (12) с соответствующими граничными условиями, например:

$$\overline{w}\Big|_{\substack{x=0\\x=l}} = 0, \quad \frac{d\overline{w}}{dx}\Big|_{\substack{x=0\\x=l}} = 0. \qquad (13)$$

Для решения поставленной задачи принимаем метод конечных разностей [2] аппроксимация краевой задачи (12), (13) и получаем система алгебраических уравнений

$$y_{i+2} - 4y_{i+1} + 6y_i - 4y_{i-1} + y_{i-2} = f_i \qquad (14)$$

i=1,2,...., n-1.

$$\begin{matrix} y_0 = 0 & y_1 = y_{-1} \\ y_n = 0 & y_{n+1} = y_{n-1} \end{matrix} \qquad (15)$$

Решения систем алгебраических уравнений (14), (15) используем метод прогонки, в котором при прямом ходе вычисляются прогоночные коэффициенты, а при обратном – находим решение системы алгебраических уравнених (14).

На основе разработанного вычислительного алгоритма и созданной программы получены точные и приближенные решения краевой задачи (12)-

(15) при следующих исходных данных: l=2 *м;* h_0=0,1 *м;* b_0=0,05 *м;* f_3^+=5 *МПа;* $E=2\cdot10^5$ *МПа.*

Краевая задача решается с различными значениями шагов сетки h ($h=1/N$, N – число узлов).

Точные и приближенные решения прогиба w при различных значениях числа узлов

	x	Точное решение	Приближенные решения				
			N=10	N=20	N=40	N=80	N=160
w	0.0	0	0	0	0	0	0
	0.1	0,0162	0,0198	0,0171	0,0164	0,0163	0,0162
	0.2	0,0512	0,0576	0,0528	0,0516	0,0513	0,0512
	0.3	0,0882	0,0966	0,0903	0,0887	0,0883	0,0882
	0.4	0,1152	0,1248	0,1176	0,1158	0,1154	0,1152
	0.5	0,1250	0,1354	0,1275	0,1256	0,1252	0,1250

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ANALYSIS OF EMPIRICAL DATA OBTAINED FROM EXPERIMENTAL AND CONTROL OBJECTS

Abstract. *This article is devoted to the development of a socio-psychological training program for adolescents, aimed at developing such qualities as involvement, empathy and social responsibility. The program, through socio-psychological approaches and practical exercises, increases the ability of adolescents to improve their interpersonal relationships and adapt to the social environment.*

Keywords: *Community relations, Self-awareness, Competence development, Motivation and participation, Development strategies, Personal qualities in adolescence, Social skills.*

In today's era of increasing globalization, protecting the youth, who are the future of the country, from various ideological threats, comprehensively understanding what exactly these spiritual threats are aimed at, and teaching them to increase their sense of involvement without being indifferent to the events taking place around us, constitute the basis of targeted education and upbringing.

It can be seen that providing young people with not only ideological understanding, but also secular education is another pillar of not straying from the right path in the process of globalization. A country with a strong cognitive potential, intelligence, and most importantly, love for the homeland, will never fall prey to those who use this process for evil. Determining the qualities of a person's involvement in certain areas, as well as analyzing the factors affecting these qualities, is one of the current urgent problems.

This process needs to be taken seriously, especially during adolescence. Taking this into account, our research aimed to empirically study the qualities of involvement in adolescents and the socio-psychological factors affecting them, and to analyze the results based on the criteria that were conditionally accepted. To achieve this goal, research methodologies were selected (detailed information on the use of these methodologies is given in Chapter 2).

Thus, by using each methodology, it is possible to obtain relevant empirical information about the opportunities associated with the qualities of involvement in adolescents.

In order to form the qualities of involvement in reforms in adolescents, socio-psychological trainings developed by us were conducted among schoolchildren studying in Tashkent, Namangan, and Andijan regions. In particular, 290 (150 boys, 140 girls) adolescents from schools in the Namangan region and 320 (170 boys, 150 girls) from the Andijan region were involved in our study. We studied them in 2 groups, namely experimental and control groups. The socio-psychological training program was conducted on the basis of psychocorrectional exercises based on certain psychological principles, individual and group interviews. Now we will proceed to the analysis of the statistical data obtained after these socio-psychological training programs. These analyses were performed using the Student's t-test and the capabilities of the SPSS data processing program.

The psychotraining program designed to form the qualities of engagement in adolescents was organized among members of the same team. This indicates that it embodied important aspects of the formation of the qualities of engagement in adolescents. The psychotraining program serves not only the individual development of adolescents, but also the provision of collective and group cohesion, mutual respect and understanding, and the prevention of conflict situations. This is also confirmed by the indicators after the application of the psychotraining program in adolescent students studying at school. When using certain psychocorrection and psychotraining methods, after conducting a comparative analysis of the empirical results obtained from the experimental and control groups, processed on the basis of the SPSS.22 program, it was observed that the qualities of involvement in adolescents developed to a certain extent.

High statistical differences were observed in the individual typological qualities of our socio-psychological questionnaire "level of involvement", "level of control", and "level of risk". That is, in this case, the “level of involvement” quality (34.3 and 44.7 reliability level $R \leq 0.000$) showed positive results in adolescents. From this, we can see that adolescents are able to adhere to existing ethical principles and rules of conduct in interpersonal relationships organized in various forms of activity, and have formed the skills to correctly approach them.

A significant statistical difference was also observed in the next trait of involvement, the “level of control” (27.1 and 36.2, reliability level $R \leq 0.001$). This indicates that adolescents have the ability to properly manage their emotions and behavior, and to adequately assess themselves in various extreme situations that arise in different situations due to the development of self-regulation skills. We can see that the “level of risk” (13.1 and 16.1, reliability level $R \leq 0.005$), which is the last trait of involvement, has also been formed to a certain extent.

This means that adolescents’ ability to express their opinions in group relationships and the ability to make decisions in a group have increased significantly compared to the results before the experiment. In the control groups, there was no difference in these traits of involvement. The scope of these analyses indicates the effectiveness of psychological training programs.

Now, in order to observe whether the comparative statistical indicators of the formation of “Personal Willingness Qualities” in adolescents of the experimental and control groups change under the influence of training sessions, that is, decrease, increase or remain unchanged, and to check the reliability of these indicators, we will analyze the results in Table 3.3 according to the Student criterion when extracting a statistical criterion of 95% reliability. According to the results of the study, the highest results were observed in the factors "courage" (M1=10.3 and M2=14.8, reliability level 0.00), "Responsibility" (M1=14.6 and M2=19.0, reliability level 0.00) and "determination" (M1=6.7 and M2=13.5, reliability level 0.00). This means that the formation of these factors affecting the qualities of involvement in adolescents leads to the development of adequate attitudes towards the socio-psychological characteristics occurring in their environment.

After all, involvement is manifested under the influence of these socio-spiritual qualities. In the following places, a high statistical indicator of the level of reliability was observed in the factors of "resilience" (8.5 and 12.9, reliability level 0.03), "enthusiasm" (10.8 and 14.6, reliability level 0.04), "goal-seeking" (7.9 and 11.9, reliability level 0.04), "independence" (13.8 and 16.6, reliability level 0.05), "attention" (13.2 and 16.2, reliability level 0.05). Relatively lower statistical differences were observed in the factors "Initiative" (13.9 and 15.9, reliability level 0.06) and "attention" (13.2 and 16.2, reliability level 0.06).

In the control group, there were no differences in these factors. So, in order to form the qualities of initiative in adolescents, it is necessary to form their willpower qualities first. Because willpower qualities are considered one of the personality traits that manifest themselves in the process of overcoming difficult situations in a person. The formation of willpower qualities in adolescents is determined not only by their attitude towards things and events, but also by the desire for success, the prevention of failure, and the formation of moral attitudes.

In the control subjects, there were no significant differences between the indicators of the factors of willpower qualities of a person. In general, the implementation of psychoprophylactic and psychocorrectional work that positively affects the assertive qualities of adolescents by forming the above-mentioned volitional qualities serves to ensure the socio-psychological development of today's adolescents.

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NONLINEAR LONGITUDINAL VIBRATION OF A CIRCULAR CONICAL ELASTIC SHELL

Abstract: *The study of nonlinear longitudinal vibrations in circular conical elastic shells represents a critical area of research within applied mechanics and structural engineering, necessitating a comprehensive understanding of complex geometries and material behaviors. Such shells are prevalent in various engineering applications, including aerospace structures, automotive components, and acoustic devices, where vibrational characteristics significantly influence functionality and performance. Despite substantial advances in linear vibration theory, the nonlinear responses induced by large deformations and material nonlinearity remain inadequately explored. This discourse delves into the fundamental principles governing these phenomena, elucidating the governing equations and boundary conditions associated with nonlinear vibrations. By considering both geometric and physical nonlinearities, this investigation aims to contribute to the existing body of knowledge, providing insights into the dynamic behavior of conical shells under longitudinal excitations, thereby underscoring the practical implications for the design and optimization of lightweight structures subjected to vibrational forces.*

Keywords: *overview of conical shell structures, importance of studying nonlinear vibrations, governing equations of motion for elastic shells.*

I. Introduction. Conical shell structures occupy a unique niche in the realm of engineering and applied mechanics, primarily due to their advantageous geometric properties that provide enhanced load-bearing capabilities. These structures are extensively utilized in various applications, including aerospace, civil engineering, and marine engineering, owing to their efficiency in material usage and structural integrity. The analysis of nonlinear longitudinal vibrations in circular conical elastic shells presents distinct challenges, particularly given their intricate geometrical and material characteristics, which often necessitate advanced theoretical frameworks for accurate modeling. Recent advancements in shell theories have emphasized the importance of considering orthotropic and anisotropic materials, reflecting a shift toward more nuanced applications in contemporary design practices. Furthermore, comprehending the stress-strain relationships within these conical geometries is essential, as it influences dynamics and stability under operational conditions (Wang et al., 2012). Thus, an in-depth understanding of conical shell structures is vital for advancing both theoretical research and practical applications in the field (Khudoynazarov et al., 2024).

The study of nonlinear vibrations is paramount in accurately predicting the dynamic behavior of structures, particularly in the context of complex geometries such as circular conical elastic shells. As these structures commonly appear in aerospace and mechanical applications, understanding their nonlinear responses under various operating conditions is critical for ensuring reliability and performance. Nonlinear vibrations can lead to phenomena such as buckling and chaotic motion, which are not adequately captured by linear analysis methods (cite3). Recent formulations have illustrated the intricacies involved in modeling these vibrations, demonstrating the necessity of advanced approaches that incorporate velocity-dependent stiffness parameters (cite4). Such insights not only enhance the theoretical framework for analyzing elastic structures but also inform practical design considerations in the aerospace sector, where maintaining the integrity of structural components under dynamic loading is essential for mission success. Thus, the significance of nonlinear vibration studies extends beyond academic inquiry, impacting real-world applications profoundly.

II. Theoretical Framework

The theoretical framework underpinning the study of nonlinear longitudinal vibration in a circular conical elastic shell is vital to advancing our understanding of complex vibrational behaviors in engineering applications. This framework broadly encompasses the principles of continuum mechanics, where the intricate interactions between material properties and geometrical configurations are thoroughly examined. Notably, it draws upon established methodologies to assess stability and structural integrity, as presented in the proceedings of the 6th Congress of the Serbian Society of Mechanics, where significant research efforts targeting theoretical and applied mechanics were highlighted (Lazarević et al., 2017). Furthermore, the framework aligns with ongoing discussions regarding the evaluation of structural stability in composite materials, explained in the context of relevant research problems raised by contemporary engineers (Structural stability research council, 1982). By synthesizing these sources, the theoretical framework guides the analysis of nonlinearities inherent to conical shells, enabling a more profound exploration of their vibrational characteristics.

The governing equations of motion for elastic shells, particularly in the context of nonlinear longitudinal vibrations, are fundamentally derived from deformation theories that account for geometric nonlinearity. Models such as Donnells and Sanders theories have established themselves as pivotal in capturing the complex dynamics exhibited by conical shells under various loading conditions. Donnells theory incorporates second-order nonlinear effects from the normal displacement, allowing for a more comprehensive understanding of axial and circumferential deformations (Bakhtiari et al., 2020). Conversely, Sanders theory builds upon the small-strain assumptions, facilitating the derivation of the strain-displacement relationships crucial for formulating motion equations. Recent advancements further refine these approaches by integrating hybrid finite element methods, yielding significant insights into the motion and stability of shells subjected to dynamic pressures (Wang et al., 2012). The interplay between material properties, geometric configurations, and boundary conditions elucidates the necessity of robust average models for predicting the intricate behaviors of these structures under nonlinear vibrations.

2.1 Nonlinear Dynamics and Perturbation Methods

In the analysis of nonlinear longitudinal vibrations in circular conical elastic shells, perturbation methods emerge as pivotal tools for understanding the complexities inherent to such dynamic systems. These methods facilitate the exploration of bifurcations and stability characteristics, particularly when accounting for geometric nonlinearities as described by von Karmans assumptions. Recent studies highlight the significant role of asymmetric perturbations in initiating bifurcation phenomena, which are critical for accurately predicting the shells response under varying conditions (Patel et al., 1906). The coupling of thermo-elastic considerations with nonlinear dynamics illustrates how environmental factors, such as temperature variations, further complicate the shells mechanical behavior (Hieu et al., 2019). By employing semi-analytical approaches, researchers can derive governing equations that account for these nonlinear characteristics, ultimately enhancing the predictive power of models used in engineering applications. Thus, the integration of perturbation methods in this context is essential for understanding and optimizing the performance of conical elastic shells under nonlinear vibrational loads.

III. Mathematical Modeling

Mathematical modeling serves as a crucial foundation for analyzing nonlinear longitudinal vibrations in circular conical elastic shells, enabling a deeper understanding of their mechanical behaviors under various conditions. The complexity inherent in these systems necessitates the application of advanced mathematical frameworks, which capture the intricacies of material properties, geometrical configurations, and external influences. Utilizing three-dimensional elasticity theories offers a benchmark against which simpler shell theories can be evaluated, as discussed in (Wang et al., 2012). This comparative analysis is vital for validating the accuracy of modeling approaches, particularly in the context of orthotropic materials, where traditional methods may fall short. Additionally, recent work on viscoelastic layer interactions in cylindrical structures illuminates how layered compositions can complicate vibrational responses, reinforcing the need for robust mathematical formulations to predict stress-strain states accurately, as presented in (Khudoynazarov et al., 2024). Thus, developing comprehensive mathematical models is essential for advancing the field and optimizing the design of such structures.

3.1 Derivation of the Nonlinear Vibration Model

The derivation of the nonlinear vibration model for a circular conical elastic shell necessitates a careful consideration of the mechanical behavior and geometric parameters that govern its dynamics. Beginning with the fundamental assumptions of elasticity and shell theory, the equations of motion can be formulated by applying the principles of continuum mechanics, particularly focusing on both linear and nonlinear dynamic effects. This is achieved by integrating displacement fields that account for the shells curvature and boundary conditions, which significantly influence its vibrational characteristics. The application of the First-Order Shear Deformation Theory (FSDT) allows for the incorporation of shear deformations and rotary inertia effects, leading to a set of coupled nonlinear differential equations. Notably, these equations can be modified to better reflect real-world scenarios, including the canonical effects described by recent advancements in shell theory (Asadi et al., 2011) and (Asadi et al., 2011), resulting in a robust framework for analyzing the nonlinear dynamics of conical shells under various loading conditions.

3.2 Boundary Conditions and Assumptions

The analysis of nonlinear longitudinal vibrations in circular conical elastic shells necessitates careful consideration of boundary conditions and underlying assumptions, as these elements fundamentally influence the predictive accuracy of models. Various shell theories, such as those proposed by Donnell and Sanders, employ different simplifications regarding kinematic relationships that can significantly affect vibrational characteristics under supersonic flow conditions (Bakhtiari et al., 2020). For instance, the selection of boundary conditions—whether simply supported, clamped, or free—can alter the stiffness and modal behavior of the shell structure, ultimately impacting the vibration frequency and stability assessment. Additionally, the assumptions regarding material properties, such as isotropy or orthotropy, must be explicitly defined, as newer materials often exhibit complex responses under stress, challenging traditional linear modeling techniques (Wang et al., 2012). Consequently, a thorough understanding of these boundary conditions and assumptions is crucial for accurately modeling the dynamic behavior of conical shells, enhancing both theoretical and practical applications in aerospace engineering.

IV. Numerical Analysis

In the context of exploring the nonlinear longitudinal vibration of a circular conical elastic shell, numerical analysis plays a pivotal role in validating computational models against theoretical frameworks. The application of advanced numerical techniques enables researchers to simulate complex interactions within the shell structures, accommodating variations in material properties, such as orthotropy and anisotropy, which are increasingly relevant in modern engineering (Wang et al., 2012). Furthermore, the analytical benchmarks established through three-dimensional elasticity theories serve as critical references, enhancing the reliability of numerical results. These benchmarks facilitate a comprehensive understanding of the vibrational behavior by allowing for the evaluation of stress-strain states in multilayered structures, which is essential for assessing design integrity under dynamic conditions (Khudoynazarov et al., 2024). Ultimately, a robust numerical analysis not only enhances the predictive capabilities for nonlinear vibrations but also informs the development of innovative materials and structures, bridging theoretical gaps that have previously hindered advancements in shell theory.

4.1 Computational Techniques for Solving Nonlinear Equations

The challenge of solving nonlinear equations is particularly pronounced in the field of nonlinear longitudinal vibration of circular conical elastic shells, where traditional analytical techniques often prove inadequate. Advanced computational techniques have emerged as vital tools for addressing these complexities, facilitating the analysis of intricate geometries and material behaviors that characterize such structures. For instance, high-performance computing platforms, as integrated into the Computational Structural Mechanics (CSM) testbed at NASA Langley Research Center, enable the development of robust numerical methods specifically tailored to these nonlinear problems (Aminpour et al.)(Gillian et al.). These methodologies not only enhance the accuracy of vibrational analysis but also expand the scope of problems that can be addressed, allowing researchers to simulate real-world scenarios that involve multiple interacting physical phenomena. Consequently, these computational techniques represent a significant advancement in the understanding and prediction of the dynamic responses of elastic shells under nonlinear conditions.

4.2 Validation of Numerical Results with Experimental Data

The validation of numerical results against experimental data is a pivotal step in confirming the accuracy of predictive models for nonlinear longitudinal vibrations of circular conical elastic shells. Recent studies demonstrate that numerical predictions derived from hybrid finite element methods (FEM) align closely with experimental outcomes, reinforcing the reliability of employed theoretical frameworks, including Donnells and Sanders theories (Bakhtiari et al., 2020). In these analyses, a comprehensive assessment of boundary conditions and geometric configurations further enhances the robustness of results, specifically in scenarios exposed to dynamic pressures. The comparative analysis indicates that the developed numerical models can effectively replicate the nonlinear behavior and flutter phenomena observed in laboratory settings (Sabri et al., 2009). Thus, through rigorous validation processes, researchers can substantiate the capabilities of numerical methodologies in accurately predicting the complex vibrational responses of circular conical shells, ultimately contributing to advancements in aerospace engineering and structural dynamics.

V. Conclusion

In conclusion, this research elucidates the complexities inherent in the nonlinear longitudinal vibrations of circular conical elastic shells, underscoring the necessity for advanced analytical frameworks and accurate computational methods. The discrepancies observed in existing shell theories, particularly regarding their applicability to orthotropic materials, reveal critical gaps that necessitate further exploration, as highlighted in the literature involving both elasticity theory and experimental validation (Wang et al., 2012). This dissertation contributes significantly to the field by establishing a robust benchmark using three-dimensional (3D) elasticity solutions, thereby enhancing the reliability of shell theories for future applications. Furthermore, it promotes ongoing discourse within the engineering community regarding structural stability and the evaluation of advanced materials, as pursued in recent technical forums (Structural stability research council, 1982). Such findings not only augment the theoretical landscape but also inform practical applications, thus paving the way for innovative designs in various engineering domains.

5.1 Summary of Key Findings

The exploration of nonlinear longitudinal vibration in circular conical elastic shells has yielded several critical findings that advance our understanding of their mechanical behavior. Notably, the study reveals that nonlinear characteristics significantly affect the vibration modes and amplitude responses of these structures under various loading conditions. The analysis demonstrates that geometric parameters, such as the conical angle and shell thickness, play crucial roles in modulating vibrational characteristics, underscoring the influence of shell geometry on stability and resonance phenomena. Furthermore, recent investigations highlighted in the 6th Congress of the Serbian Society of Mechanics indicate that the integration of sophisticated mathematical models and computational techniques can provide improved predictive capabilities for real-world applications, enhancing design frameworks in engineering contexts (Lazarević et al., 2017). Collectively, these findings emphasize the necessity for further research that bridges theoretical developments with practical implementations, illuminating the path for future innovations in the field (Lazarević et al., 2017).

5.2 Implications for Future Research and Applications

In exploring nonlinear longitudinal vibrations of circular conical elastic shells, significant implications for future research and practical applications arise. Advancements in computational modeling techniques could enhance the accuracy of predictions regarding vibrational behavior under various loading conditions, which remains critical for the aerospace and civil engineering sectors. Furthermore, understanding the underlying mechanics may pave the way for innovative design modifications that improve the structural integrity and efficiency of thin-walled structures. This foundational knowledge could also facilitate interdisciplinary applications, such as in the development of vibration-dampening materials and systems that enhance performance in high-stress environments. Additionally, future experiments that investigate the interaction of environmental factors—such as temperature fluctuations and material degradation—on vibrational properties could yield insights into the long-term behavior of these structures. Ultimately, a comprehensive understanding of these dynamics promises to inform both and practical engineering solutions.

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O ‘ZBEKISTONDA MUSIQIY CHOLG‘ULARNING

Annotatsiya: *Ushbu maqolada XX asrga kelib xalq ijrochilik amaliyotida ommalashgan cholg‘ulami o‘rganib tadqiq etishga e’tibor kuchaydi. Buni Abdurauf Fitrat o‘zining ijodida boshlab berib, qimmatli ma’lumotlarni bayon etadi. Shundan so‘ng musiqashunos olimlar cholg'ushunoslik ilmining rivojida bir qator samarali tadqiqotlar olib boradilar. V.Belyayev, F.Karomatov, T.S.Vizgo, A.Malkeevalar shular jumlasidan bo'lib, ular O'rta Osiyo musiqa cholg'ushunosligi sohasining rivojiga samarali hissa qo'shdilar. Ularning tadqiqotlarida an’anaviy cholg‘ular musiqiy madaniyatning asoslaridan biri ekanligi va xalq ma’naviyatining go‘zal an’analarini o‘zida mujassam etib kelayotganligi yoritilgan.*

Kalit so'zlar: *rubob, tanbur, dutor; damli sozlardan: ruhafzo, shammoma, ud, rud, qo'buz, g'ijjak, navha, nuzxa, qonun, chang.*

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MUSICAL INSTRUMENTS IN UZBEKISTAN

Abstract: *In this article, attention is paid to the study and research of musical instruments that became popular in folk performance practice in the 20th century. Abdurauf Fitrat initiated this in his work and presented valuable information. After that, musicologists conducted a number of fruitful studies in the development of the science of instrumental music. V. Belyaev, F. Karomatov, T. S. Vizgo, A. Malkeeva are among them, who made a fruitful contribution to the development of the field of Central Asian musical instrumental music. Their studies highlight the fact that traditional musical instruments are one of the foundations of musical culture and embody the beautiful traditions of folk spirituality.*

Key words*: rubob, tanbur, dutor; from the rest words: ruhafza, shammoma, ud, rud, qobuz, gijjak, navha, nuzkha, kanon, chang.*

Ma’lumki, musiqiy cholg‘ular xalqlarning moddiy hamdama’naviy boyligidir. Chunonchi, har bir xalq o‘z milliy merosi, davrlar osha yuzaga kelgan an’analarini milliy ohanglar orqali tarannum etuvchi va xalqning milliy ma’naviyatiga xos yaratilgan amaliy san’at namunalari orqali ularga mos keluvchi cholg'u asboblariga egadirlar. 0 ‘zbek musiqiy cholg'ular olami bu xususda ma’nan va moddiy nuqtai nazardan boy hamda rang-barang ekanligini e’tirof etib o ‘tish lozimdir. Qolaversa, qaysiki xalqning ma’naviyati yuksak bo‘lsa, uning tarixi va unga mos merosi ham ulkandir. Tarixdan ma’lumki, o‘zbek xalq cholg‘ulari rang-barang tarzda, o‘ziga xos shakllangan va musiqaning barcha tarmoqlariga mos cholg‘u asboblari shakllanib, asrlar osha rivojlanib kelgan. 0 ‘tmish allomalari Al-Forobiy (IX asr) o‘zining «Katta musiqa kitobi»da, Safiuddin Urmaviy (XII asr) musiqiy risolasida, Abdulqodir Marog‘iy (XIV asr) «Jami al-alhon fi-ilm al-musiqiy» risolasida, Ahmadiy (XIV asr) «Sozlar munozarasi» asarida, Zaynullobiddin Husayniy (XV asr) «Risola dar bayoni qonuni va amaliy musiqiy» risolasida, Abdurahmon Jomiy (XV asr) «Musiqiy risola»sida, Amuliy (XVI asr) «musiqa risola»sida, Darvesh Ali Changiy (XVII asr) «Musiqiy risola»larida musiqiy cholg'ulami o'rganib tadqiq etish masalalarining turli tomonlariga to‘xtalib, o‘z davrlarining musiqiy cholg‘ulari tasnifotini bayon etganlar.

O ‘tmishning zabardast shoirlari o‘z asarlarida musiqiy cholg‘ular nomlarini zikr etishda sozlarga takror va takror murojaat etganlar. Ayniqsa, buyuk mutafakkir shoir Alisher Navoiy musiqa ilmining eng nafosatli va mumtoz kerakli tarmoqlariga urg‘u berib o‘tganliklarini asarlaridan bilib olish mumkin. XX asrga kelib Eyxgom, Abdurauf Fitrat, Viktor Belyayev kabi olimlar musiqiy cholg'ularni o ‘rganish xususida samarali ish olib borganlar. Tarixiy qo‘lyozmalar, adabiy asarlar va musiqiy risolalarda 0 ‘rta Osiyo xalqlari amaliyotida vujudga kelgan barcha cholg'u asboblarining nomlari o‘z ifodasini topgan. Musiqiy risolalarda esa cholg'ularga tegishli (shakl, tuzilish, torlar nisbatlari, tayyorlash mezonlari, cholg‘ular uchun ishlatiladigan daraxtlar va h.k. haqida) ma’lumotlar keltirilgan. Ularda, torli cholg‘ulardan: borbad, ud, rud, qo'buz, g'ijjak, navha, nuzxa, qonun, chang, rubob, tanbur, dutor; damli sozlardan: ruhafzo, shammoma, org'anun, sibizg'i, nayi anbon, chag'ona, bulamon, sumay, nay, qo'shnay, kamay; urma cholg'ulardan: daf, doyra, nog‘ora, safoil kabilar haqida turli darajadagi ma’lumotlar keltirilgan. Al-Forobiy, Abdurahmon Jomiy, Amuliy, Darvesh Ali Changiy, Abdurauf Fitrat, Viktor Belyayevlar o ‘z risolalarida cholg‘u sozlariga katta e’tibor bilan yondoshib, ularni amaliyotdagi tutgan o‘mi, ayrim falsafiy xususiyatlari hamda ma’lum darajada tasnifoti bilan yoritganlar.Odatda, musiqiy cholg'ular ijrochilik amaliyotining turli yo'nalishlarida qo'llanilib kelingan. Avvalo eng sodda cholg'ular yaratilib, kundalik hayot tarzida keng foydalanilganligini qayd etish joizdir. Bunday cholg'ular har bir xalqning cholg'ular dunyosida mavjud, ayni paytda ham iste’molda bo‘lib keladi. 0 ‘zbek xalq ijrochilik amaliyotida saqlanib, qo'llanib kelinayotgan cholg'ulardan chang, qo‘biz, sibizg'i shular jumlasidandir. Bu cholg'ularni tayyorlash va ijro etish ham oddiyligi bilan ajralib turadi.Davrlar o'tishi, jamiyat taraqqiyoti mezoniga cholg'u sozlarham hamnafas tarzda rivojlanib, zamonaga mos takomillashib, mukammallashib borgan.

Tarixiy manba’larda, Qulmuhammad Udiyning ud cholg'usiga to‘rtinchi sim taqqanligi yoki g‘ijjak cholg‘usining awal ikki torli, keyin uchinchi va to'rtinchi torlari taqilganligi kabi ma’lumotlar aynan cholg'ular takomillashishi bilan bog'liqdir. Takomillashish jarayonida cholg'ulaming shakl va tarannum (ovoz) mezonlarini boyitish katta ahamiyat kasb etgan.Bu ikki mezon cholg'ularning ma’nan va moddiy qiymatini ham belgilashga asos bo‘lib xizmat qilgan. Zero, chiroyli cholg'u go‘zal ovozga ega ekan, u xalq ma’naviy boyligi hamda mulki ekanligini e’tirof etish lozimdir.XIX asr oxiri va XX asming o'zida o'zbekona chang, qashqar ruboblari shakllanib iste’molga kirdi. Ud va qonun sozlari qayta tiklanib,ijrochilik amaliyotini sezilarli darajada boyitdi. Afg'on nibobi hamda kund sozlari ham o‘ziga xos jozibasi bilan amaliy jarayondan munosib o‘rin oldi.

Zamonaviy kompozitorlik ijodiyoti bilan bog'liq holda bir qator chang, rubob, dutor, g‘ijjak kabi xalq cholg‘ularining oilaviy namunalari yaratildi. Pirovardida, zamonaviy jarayonga kelib musiqiy cholg‘ulaming turli yo‘nalishlaiga mos, xilma-xil tarkiblari yuzaga keldi. Amaliyotda an’anaviy, qayta ishlangan, takomillashgan, qayta tiklangan, yangi zamonaviy (hamda elektron) xillari keng qo‘llanilmoqda.Qayd etish joizki, cholg‘ular, cholg'u musiqasi hamda ijrochiligi azal-azaldan bir-birini to‘ldirib, rivojlanishiga va takomillashishiga zamin yaralib kelgan.

Ijrochilik mezonining rivoji cholg‘ular ko'lamini kengaytirish, imkoniyatlarini oshirish uchun xizmat qilgan. 0 ‘zbek an’anaviy cholg'ularining tarixiy shakllanishi ham bir qator xalq milliy an’analari negizida qaror topgan. Kasbiy musiqaning ijodiyoti va uning rivoji aynan cholg‘ular bilan chambarchas bog‘liqligini qayd etib o ‘tish lozimdir. Chunonchi, mumtoz ijodiyot holg‘ularning mukammallik xususiyatlarini namoyish etibgina qolmay, ularning rivojiga ham o‘z ta’sirini ko‘rsatib kelgan. Shu bois, cholg‘ular va cholg‘u musiqasi an’analari o'zining shakllanish davri, ya’ni qadim zamonlardan xalq musiqa madaniyatining asosiy omillaridan biri sifatida muhim ahamiyat kasb etib kelgan. Cholg'ushunoslik ilmi fanda «organologiya» deb yuritiladi va cholg‘u sozlarning shakllanishi, amaliyotda qo'llanilishi hamda rivojlanish mezonlarini ilmiy asoslab beradi. Ushbu fanning rivojida bir qator Sharq va G‘arb olimlari qatorida o‘zbek musiqashunos olimlari ham munosib tadqiqotlar olib borganlar. Qadimiycholg'ular ko‘proq tarixiy obidalar orqali kashf etilib, keyinchalik tarix, adabiyot va musiqiy risolalarda bayon etilgan.Cholg'ularning ilk tasvirlari qadimgi odamlarning istiqomat joylari — g‘orlarda, qoya toshlarda o‘yib chizilgan, imoratlarning peshtoqlari, saroylarning devoriy suratlari, sopol idishlarga chizilgan suratlarda va terrakota haykalchalarida aksini topgan. O'rta Osiyo va 0‘zbekiston hududlarida Afrosiyob, Dalvarzin tepa (Surxondaryo), Varaxsha (Buxoro), Ayritom, Zartepa, Qo‘y qirilgan va Qo‘zi qirilgan tepalar (Ko'hna Urganch), Panjikent, Qazilmalar va qazilmalardan topilgan ashyolar xususida T.S.Vizgoning «Музыкальные инструменты Средней Азии» исторические очерки. М.,«Музыка» 1980 kitobida batafsil ma’lumot berilgan. kabi qadimiy joylar qazilmalaridan topilgan chizma surat va haykalchalar shular jumlasidandir. Qadimiy suratlarda arfa, ud,naysimon hamda urma cholg‘ular aks ettirilgan. Musiqiy cholg‘u ijrochiligiga bo‘lgan ehtiyojni aynan ushbu suratlardan ko‘rish ham mumkin. Chunki suratlarda nafaqat yakka ijrochilar yoki cholg‘u asbobining o‘zi aks ettirilgan, balki, Ayritom qazilmalaridan topilgan tarixiy obidalarda qadimgi Sug‘d madaniyatiga xos ansambl, ya’ni bir qator musiqachilarning cholg'ularni dasta bo‘lib ijro etayotganlarining aksi tushirilgan3 Musiqiy cholg'ulaming ta’rifi ya’ni shakl-tuzilishlari tarkibiy jihatlari, nomlari, ijrochilari bilan bog‘liq ma’lumotlar, asosan 0 ‘rta asrlardan boshlab badiiy adabiyot asarlari hamda musiqiy risolalarida yoritila boshlanadi. Demak, 0 ‘rta asrlarga kelib qadimdan shakllanib takomillashib kelgan xalq musiqiy cholg‘ulari ijrochilik amaliyotida o‘z o‘mini topgan. Shu bilan biiga nafaqat xalq, balki olimlaming e’tiborini ham qozongan. Bu jarayonni O.Matyoqubov «Maqomot» kitobida quyidagicha bayon etadi: «Cholg‘ularga bunday atroflicha qiziqishlar zamirida musiqiy asboblar ijrochilik faoliyatini ob’ektiv aks ettirishdir,degan ilmiy tushuncha yotadi. Forobiy ta’biri bilan aytganda, cholg‘u asboblarining shakllanishi, awalo, amaliyotda yuzaga keladi. Ularning tembr-akustik xususiyatlari panda va tovushqatorlari bevosita ijro jarayonida shakllanadi va takomillashadi. Shundan so‘nggina cholg‘ular olimlar kuzatuvi va umumlashmalariga zamin bo‘lishi mumkin»,Abu Nasr Forobiy, Abu Ali Ibn Sino, Abdulloh al-Xorazmiy, Zaynullobiddin Husayniy, Safiuddin Urmaviy, Abdulqodir Marog‘iylar5 o‘z risolalarida cholg'ular va ularning bir qator sifat va xususiyatlari xususida mufassal so‘z yuritganlar. 0 ‘rta asr risolalarida cholg‘ular takomillashishi hamda rivoji yo‘lida qilingan o‘zgarishlar, ijrochilik amaliyotida yaratilgan yangi sozlar va iste’moldan chiqqan cholg‘ular tasnifotini ko‘rish mumkin.Musiqa san’atining boy ma’naviy jihatlari badiiy adabiyot namoyandalarini ham befarq qoldirmagan. Musiqa sehri,qoridagi manba.AO.Matyoqubov «Maqomot» T., «Musiqa» 2004-y., 272-b.5 0 ‘rta asr musiqashunoslarining risolalari xususida quyidagi adabiyotlarda ma’lumotlar yoritilgan: T.C.Вього «Музнкальнме инструментн Средней Азии», 1980; I.Rajabov «Maqomlar masalasiga doir», T., «Fan» 1963; «Музмкальное, театральное искусство и фольклор», T., «Fan» 1992; O.Matyoqubov «Maqomot» T., «Musiqa» 2004; «Музмкальная эстетика стран Востока» 1967.

cholg‘ulardan taralgan sirli ohanglar Sharq badiiy proza va mumtoz she’riyati, ya’ni badiiy adabiyotida o‘ziga xos ifodasini topadi. Bular benazir cholg'u sozlar nomlanishi, o‘z davrining mashhur ijodiyot namunalari, bastakor, sozanda va xonandalar ijodi, xalq musiqa ijodiyoti va an’analarida ko'rinadi. 0 ‘rta asriarda musiqiy jarayonga ko‘proq ahamiyat beigan adabiyot namoyandalari Firdavsiy, Ro'dakiy, Hofiz, Sa’diy, Jomiy va Navoiylandir.Jumladan: Firdavsiy «Shohnoma»da yozadi:Yig'ildi akobir, cholg'uchi, raqqos, Podsho shodligidan sochar dur, olmos. Chiqar avjiga nay, childirma sasi, Chirillab aylanar qizlar galasi. Ulug‘lar sha’niga qadah paydar-pay, Sahargacha tinmas tanbur, rubob, nay6.Musiqiy iboralar A.Navoiy davriga kelib adabiy merosda mukammal ifodasini topa boshladi. Ayniqsa, Abdurahmon Jomiy va Alisher Navoiy ijodiy faoliyatlari buni yaqqol namoyon etdi.Alisher Navoiyning «Badoye’ ul-vasot» asaridan g‘azal: Ey, mug‘anniv. chun nihon rozim bilursen — sqz tuz.Tortibon munglig‘ navo sozing bila, ovoz tuz. Navha ohangi tuzub og‘oz qil mahzun surud. U surud ichra hazin ko‘nglumga maxfiy mz tuz. Istasangkim, nap‘manp ichra ko‘p xaloyiq olmagay, U ikavdin ko‘p vale mendin tarona oz tuz. Gar mening holim desang tuz barcha dostoni niyoz, Dilbarimdin nag‘masoz etsang surudi noz tuz. Chun bu gulshanda nishiman qilg'ali qo‘ymas hazon, Gul firoqi savtin. ey, bulbul, qilib parvoz tuz. 6 A.Firdavsiv, «Shohnoma» T., G‘.G‘ulom nomidagi adabiyot va san’at nashriyoti, 1984, 199-bet. 1 0 Bazm aro o ‘rtar Navoiyni nihon munglug1 surud. Ey, mug‘anniv. chun nihon rozim bulursen — soz tuz7 Ulug‘ mutafakkir shoir bir g'azalning o‘zida 14 ta musiqiy iborani keltiradi. Zero, g‘azalning o‘zi ham bastakorlik amaliga xosdir. avoiyda bunday musiqiy iboralar juda ko‘p uchrashini uning asarlaridan bilish mumkin. XV--XVI asrga kelib miniatura san’ati rivojlana boshlaydi. Firdavsiy, Nizomiy, Amir Xusrav Dehlaviy kabi shoirlaming asarlariga chizilgan minniaturalarda o ‘z davrining mashhur cholg‘ulari o‘z aksini topgan8 «Shoxnoma»ga chizilgan minniatura: 7 A lish e r N a v o iy « B a d o y e ’ u l-v as o t» m u k a m m a l a s a r la r to 'p la m i. B e sliin ch i to r n , T ., « F an » 1 9 9 0 -y , 160—161 - b e tlar . " M in n ia tu r a la r v a u la r n in g s h a r h i T .C .В ь г з г о «Музнкальнме инструменть! С р е д н е й А зи и » . Т ., 1 9 80, k ito b id a b atafsil b a y o n etilg an .XIX asming II yarmiga kelib o'zbek an’anaviy cholg‘ularini o‘rganishga alohida ahamiyat berila boshlanadi. 0 ‘rta Osiyo madaniyatiga qiziqish G‘arb mamlakatlarida ortib boradi va uni o‘rganish maqsadida mutaxassislar kela boshlaydilar.

Marko Polo,Vamberi, Ankomin, Leysek, Eyxgorn kabi sayohatchi etnograflar, tarixchilar, kopelmeysterlarning kundaliklarida zikr etilgan ma’lumotlar keyinchalik yirik-yirik maqolalar va kitob tarzida nashr yuzini ko'radi. Eyxgomning o‘zi butun 0 ‘rta Osiyoni aylanib chiqib, olamshumul muvaffaqiyatga erishadi. Ilk bor cholg‘ular kolleksiyasini yig'adi va bir qator shaharlarda namoyish etadi9 XX asrga kelib xalq ijrochilik amaliyotida ommalashgan cholg‘ulami o‘rganib tadqiq etishga e’tibor kuchaydi. Buni Abdurauf Fitrat10 o‘zining ijodida boshlab berib, qimmatli ma’lumotlarni bayon etadi. Shundan so‘ng musiqashunos olimlar cholg'ushunoslik ilmining rivojida bir qator samarali tadqiqotlar olib boradilar. V.Belyayev11, F.Karomatov12, T.S.Vizgo, A.Malkeevalar shular jumlasidan bo'lib, ular O'rta Osiyo musiqa cholg'ushunosligi sohasining rivojiga samarali hissa qo'shdilar. Ularning tadqiqotlarida an’anaviy cholg‘ular musiqiy madaniyatning asoslaridan biri ekanligi va xalq ma’naviyatining go‘zal an’analarini o‘zida mujassam etib kelayotganligi yoritilgan. XX asming 30—40-yillariga kelib cholg‘ulami takomillashtirish jarayonining yangi bosqichi boshlanadi. Bu jarayon 0 ‘zbekistonda kompozitorlik ijodiyotining jahon andozalariga mos rivoji bilan bog‘liq edi.

Ijrochilik amaliyoti ham shunga moslashib, simfonik orkestr rusumi doirasida o‘zbek xalq cholg‘ulari orkestrining iste’molga kirib kelishi bilan xarakterlanadi. Amaliyotda mavjud cholg'ularni orkestr tarkibiga moslash ishlari negizida bir qator cholg'ulaming oilaviy namunalari yaratildi. Natijada, simfonik orkestrga muqobil xalq cholg‘ulari orkestri yaratildi. Orkestming rang-barang ovozi tarannumini ta’minlash uchun rubobning — prima, alt, tenor; dutoming — prima, bas, kontrabas; g‘ijjakning — alt, qo‘biz bas, qo'biz kontrabas; changning — bas, tenor, alt namunalari yaratildi. Ushbu cholg'ular zamonaviy musiqa ijrochilik 9 A.Eyxgorn 1870-yilda 0 ‘rta Osiyo xalqlarining musiqiy cholg'ularini yig‘ib kolleksiya yaratgan. Eyxgomning musiqiy cholg'ular kolleksiyasi Glinka nomidagi Davlat musiqa madaniyati muzeyida saqlanadi.

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PSYCHOLINGUISTIC BASIS OF THE TASK-BASED APPROACH TO FOREIGN LANGUAGE TEACHING

Abstract *Task-based language teaching (TBLT) is considered one of the innovative approaches in foreign language teaching (FLT) methodology. Although many researchers have shed light on the principles and theories of this approach, a research gap still exists in successfully implementing it within Uzbekistan's foreign language teaching system, particularly in teaching English to higher education students. To address this gap, we have studied the psychological foundations of the TBLT approach and adapted them to the target context. Based on the findings, it can be concluded that providing students with real-life tasks is crucial for emotionally motivating them to learn a foreign language.*

Key words: *task based language teaching, psycholinguistics, real life tasks, motivation in Fl learning, emotional state, language skills.*

Introduction

The phenomena of nature and society are interconnected and develop through mutual interaction. Sciences, as systems that reflect objective reality—that is, the essence of nature and society—cannot exist independently of one another. Each phenomenon or subject can serve as a research object for various scientific disciplines. For instance, the phenomenon of "language" is studied from different perspectives: linguistics analyzes language as a social phenomenon, psychology examines its connection to psychological processes, and didactics focuses on methods of teaching language. In this way, sciences function as interdependent and mutually enhancing systems.

In this process, the scientific contributions of psychology, pedagogy, and linguistics play a crucial role in shaping modern principles and methods in foreign language methodology. Additionally, the innovative approaches and outcomes developed by foreign language teaching methodology are widely applied in other fields of pedagogy. This integrative process not only strengthens interdisciplinary connections but also contributes to the overall effectiveness of the educational process. Based on this foundation, we examine the psychological principles of using a real communicative situation-based approach in foreign language teaching.

Literature Review

Task-based Language Teaching (TBLT) has gained significant attention as an innovative and practical approach in the field of foreign language teaching (FLT). Originating from the communicative approach, TBLT emphasizes the use of real-life tasks to enhance learners' communicative competence [1]. The core idea is to provide students with meaningful and contextually relevant tasks that engage their cognitive and linguistic resources, thereby improving their language skills [2].

Psychological foundations play a crucial role in the successful implementation of TBLT. Research indicates that incorporating real-world tasks not only improves linguistic abilities but also emotionally motivates learners by making the language learning process relevant to their needs [3]. Scholars such as Ellis [4] have highlighted the significance of task design, emphasizing the necessity of balancing task complexity and learner proficiency to optimize outcomes.

Despite its global recognition, challenges persist in adapting TBLT to specific educational contexts, such as Uzbekistan's higher education system. Studies reveal that the gap between theoretical understanding and practical application often limits the effectiveness of this approach [5]. Factors such as limited teacher training, lack of culturally relevant materials, and insufficient institutional support have been identified as barriers to implementation [6]. Researchers emphasize the need for localized adaptations of TBLT principles to align with the sociocultural and educational realities of different regions [7].

Results and discussion

In analyzing the relationship between language and thought, language is primarily viewed as a process of perception. According to psychologist I.P. Pavlov's theory of the two signal systems, the first signal system enables individuals to perceive the external world through senses such as hearing, vision, and motor movements. The second signal system, however, facilitates the abstraction of thoughts through linguistic symbols and their expression in communication. This process becomes even more dynamic in real communicative situations, as learners perceive speech contexts, develop corresponding thoughts, and express them accordingly.

Several brain mechanisms are involved in the processes of perceiving and expressing language:

- **Auditory analyzer**: Learners use their auditory abilities to perceive sounds and understand speech flow. This analyzer plays a particularly important role in learning pronunciation and developing listening comprehension skills.
- **Speech-motor analyzer**: This mechanism is utilized during the verbal expression of speech. It is directly linked to automating the articulation and pronunciation of words.
- **Visual analyzer**: This analyzer is fundamental for perceiving written materials, reading, and interpreting graphic symbols. It actively contributes to the development of learners' written communication skills.

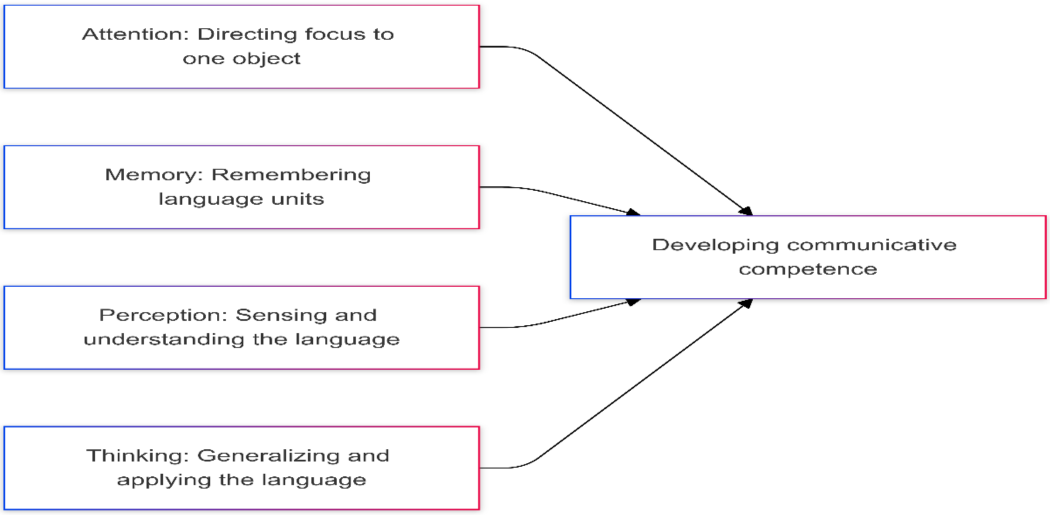

Figure 1. The Relationship of Psychological Processes in Developing Students' Communicative Competence

The approach based on real communicative situations integrates the functions of these analyzers. For instance, learners initially perceive linguistic units by listening, then apply them in both spoken and written forms. This process facilitates the transition from language perception to its practical application. When teaching a phrase like "a pen" in English, learners first perceive the unit aurally, then learn it in its written form. Following this, they internalize grammatical generalizations and practice using the unit independently in new contexts.

Conclusion

In conclusion, psychological processes such as attention, memory, perception, and thinking play a crucial role in students' successful acquisition of a foreign language. The harmonious functioning of these processes is particularly significant in enhancing communicative competence through activities based on real communicative situations. The real communicative situation-based approach prioritizes the automation of listening and speaking skills in foreign language teaching. This principle focuses on developing the practical skills necessary for applying language in real-life contexts. Listening and speaking form the foundational stages of language learning, and automating these skills significantly contributes to the effective development of students' communicative competence.

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YASHIL IQTISODIYOTGA O'TISHNING MAHALLIY IQTISODOYGA TA'SIRI

Annotatsiya :Ushbu maqola yashil iqtisodiyotga o'tish va uning mahalliy iqtisodiyotga ta'sirini o'rganadi, barqaror iqtisodiy amaliyotlarga o'tish bilan bog'liq imkoniyatlar va qiyinchiliklarga e'tibor qaratadi. Maqolada yashil iqtisodiyotning asosiy tamoyillari, barqaror rivojlanish va yashil iqtisodiyot o'rtasidagi bog'liqlik, hamda iqtisodiy o'sishni ekologik barqarorlikni saqlash orqali boshqarishda innovatsiyalarning roli muhokama qilinadi. Shuningdek, maqola Germaniyaning qayta tiklanadigan energiyaga o'tishi va O'zbekistonning yashil iqtisodiyot strategiyalarini amalga oshirishdagi tajribalarini keltiradi. Maqolada, shuningdek, yashil iqtisodiyot tamoyillarini muvaffaqiyatli amalga oshirishda duch kelinayotgan texnologik, iqtisodiy va ijtimoiy to'siqlar ko'rib chiqiladi. Xulosa sifatida, maqola yashil iqtisodiyotning barqaror rivojlanishni qo'llab-quvvatlaydigan va ijtimoiy farovonlikni ta'minlaydigan yondashuvlar zarurligini ta'kidlaydi.*

Kalit so'zlar*: Yashil iqtisodiyot, barqaror rivojlanish, ekologik iqtisodiyot, mahalliy iqtisodiyot, qayta tiklanadigan energiya, atrof-muhitni muhofaza qilish, innovatsiyalar va texnologiyalar, ijtimoiy-iqtisodiy o'zgarishlar.*

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THE IMPACT OF THE TRANSITION TO A GREEN ECONOMY ON THE LOCAL ECONOMY

Annotation:This article examines the transition to a green economy and its impact on the local economy, focusing on the opportunities and challenges associated with the shift towards sustainable economic practices. The paper discusses the key principles of green economy, the relationship between sustainable development and green economy, and the role of innovation in driving economic growth while maintaining environmental balance. The article also highlights global and local case studies, such as Germany's transition to renewable energy and Uzbekistan's efforts to implement green economy strategies. Additionally, the paper identifies the main challenges that hinder the successful implementation of green* *economy practices, including technological, economic, and social barriers. The conclusion emphasizes the importance of integrated approaches, government support, and public awareness in fostering a green economy that supports sustainable development and social well-being.*

Key Words: *Green economy, sustainable development, ecological economics, local economy, renewable energy, environmental protection, innovations and technologies, socio-economic changes.*

Kirish

Bugungi kunda dunyo miqyosida ekologik muammolar va iqtisodiy barqarorlikni ta’minlash zaruriyati global kun tartibida muhim masalaga aylangan. Rivojlanayotgan mamlakatlar, jumladan, O‘zbekiston uchun ham yashil iqtisodiyotga o'tish milliy iqtisodiyotni barqaror rivojlantirishning muhim omili sifatida ko'rilmoqda. Yashil iqtisodiyotning asosiy tamoyillari atrof-muhitni himoya qilish, resurslardan oqilona foydalanish va iqtisodiy o‘sish bilan ekologik muvozanatni ta’minlashni nazarda tutadi. Ushbu yondashuv nafaqat ekologik barqarorlikni oshiradi, balki mahalliy iqtisodiyotda yangi imkoniyatlarni yaratish, aholining farovonligini oshirish va ijtimoiy tenglikni ta'minlashga ham xizmat qiladi.

Mahalliy iqtisodiyotda yashil iqtisodiyotga o‘tishning iqtisodiy, ekologik va ijtimoiy jihatlari chuqur tahlilni talab qiladi. Yashil texnologiyalarni joriy qilish, qayta tiklanadigan energiya manbalaridan foydalanish va chiqindilarni qayta ishlash kabi chora-tadbirlar, bir tomondan, ekologik xavfsizlikni oshirsa, boshqa tomondan, yangi ish o‘rinlarini yaratadi va iqtisodiy faoliyatni diversifikatsiyalash imkonini beradi. Ammo bu jarayon qator qiyinchiliklar bilan ham bog‘liq, masalan, moliyaviy cheklovlar, texnologik imkoniyatlarning yetarli emasligi va aholi o‘rtasida ushbu yangiliklarni qabul qilishdagi qarshiliklar.

Mazkur maqola yashil iqtisodiyotga o'tishning mahalliy iqtisodiyotga ta'sirini o‘rganishga bag‘ishlanadi. Unda, birinchi navbatda, yashil iqtisodiyotning nazariy asoslari va uning ijtimoiy-iqtisodiy ahamiyati yoritib beriladi. Keyinchalik, mahalliy iqtisodiyotda yuzaga keladigan imkoniyatlar va muammolar ko‘rib chiqiladi. Shuningdek, O‘zbekistonning yashil iqtisodiyotga o'tish tajribasi va ushbu yo'nalishdagi strategik qarorlar amaliy misollar asosida tahlil qilinadi. Ushbu tadqiqotning asosiy maqsadi – yashil iqtisodiyotga o'tishning mahalliy iqtisodiyotga ijobiy va salbiy ta'sirlarini aniqlash va ushbu yo‘nalishda rivojlanish uchun amaliy tavsiyalar ishlab chiqishdir.

Adabiyotlar tahlili.

Yashil iqtisodiyot va barqaror rivojlanish o‘rtasidagi bog‘liqlikni chuqur o‘rganish ko‘plab ilmiy ishlar va xalqaro hisobotlarning diqqat markazida bo‘lgan. Pearce, Markandya va Barbier (1989) tomonidan taqdim etilgan *Blueprint for a Green Economy* asari yashil iqtisodiyotning asosiy prinsiplari, xususan, tabiiy resurslardan oqilona foydalanish va ekologik innovatsiyalarning iqtisodiy rivojlanishga qo‘shadigan hissasini tahlil qilgan. Barqaror rivojlanishning nazariy asoslari esa BMTning Bruntlend hisobotida (1987) yoritilgan bo‘lib, unda hozirgi avlodning ehtiyojlarini qondirgan holda kelajak avlodlar uchun imkoniyatlarni saqlab qolish tamoyili muhim deb e’tirof etilgan. Yashil iqtisodiyotning xalqaro tajribasiga to‘xtalsak, UNEP (2011) hisobotida ushbu modelning kambag‘allikni kamaytirish va ekologik muvozanatni ta’minlashdagi o‘rni batafsil bayon etilgan. Shu bilan birga, OECD (2013) yashil iqtisodiyotning iqtisodiy o‘sishga ijobiy ta’sirini va yashil texnologiyalarning rolini tahlil qilgan. O‘zbekiston misolida, "Yashil iqtisodiyotga o‘tish strategiyasi" (2020) mamlakatda energiya samaradorligini oshirish va qayta tiklanadigan energiya manbalarini rivojlantirishga qaratilgan bo‘lib, ushbu yondashuv mahalliy iqtisodiyotning ekologik va ijtimoiy jihatlarini mustahkamlashga xizmat qiladi. Nazarova va Saidov (2022) tomonidan olib borilgan tadqiqotlarda mahalliy sharoitda yashil iqtisodiyotga o‘tishda duch kelinayotgan qiyinchiliklar va imkoniyatlar o‘rganilgan. Shuningdek, Schaltegger va Wagner (2017) yashil iqtisodiyotning texnologik innovatsiyalar va barqaror tadbirkorlik bilan bog‘liqligini o‘rganib, ekologik innovatsiyalarning iqtisodiy samaradorlikka bo‘lgan ijobiy ta’sirini ko‘rsatgan. Ushbu tadqiqotlar xulosasiga ko‘ra, yashil iqtisodiyot nafaqat ekologik barqarorlikni ta’minlaydi, balki ijtimoiy adolat va iqtisodiy samaradorlikni oshirishda ham muhim ahamiyat kasb etadi.

Nazariy asoslari

Yashil iqtisodiyot nazariyasi barqaror rivojlanish konsepsiyasining amaliy ifodasi bo‘lib, u iqtisodiy o‘sish jarayonida ekologik muvozanatni saqlashni asosiy tamoyil sifatida belgilaydi. Ushbu nazariya tabiat resurslaridan oqilona foydalanishni, chiqindilarni kamaytirishni va qayta tiklanadigan energiya manbalariga o‘tishni targ‘ib qiladi. Pearce, Markandya va Barbier (1989) tomonidan ishlab chiqilgan "yashil iqtisodiyot" tushunchasi resurslarni tejash va ekologik zararlarni minimallashtirish orqali iqtisodiy faoliyatni barqaror qilishni nazarda tutadi. Shuningdek, BMTning Barqaror rivojlanish bo‘yicha Bruntlend hisobotida (1987) yashil iqtisodiyotning asosiy tamoyillari, xususan, tabiiy resurslardan oqilona foydalanish va ekologik xavfsizlikni ta’minlash zarurligi e’tirof etilgan.

Yashil iqtisodiyotning asosiy nazariy tamoyillaridan biri – iqtisodiy o‘sish va ekologik barqarorlik o‘rtasidagi muvozanatni ta’minlashdir. Ushbu tamoyil bo‘yicha iqtisodiy faoliyat ekologik cheklovlarni hisobga olgan holda amalga oshirilishi kerak. UNEP (2011) tomonidan nashr etilgan hisobotda yashil iqtisodiyotning ijtimoiy va iqtisodiy barqarorlikka bo‘lgan ta’siri tahlil qilinib, qayta tiklanadigan energiya va ekologik innovatsiyalarni rivojlantirish muhim ekani ta’kidlanadi. Bundan tashqari, ekologik zararlarni kamaytirish orqali aholining turmush darajasini yaxshilash va yangi iqtisodiy imkoniyatlar yaratish nazariyaning asosiy maqsadlaridan biridir.

Yashil iqtisodiyot barqaror rivojlanishni amalga oshirish uchun davlat siyosati, biznes sektor va jamoatchilikning birgalikdagi harakatlarini talab etadi. Ushbu yondashuvda iqtisodiyotning "yashillashuvi" nafaqat ekologik xavfsizlikni ta’minlaydi, balki yangi ish o‘rinlari yaratish va innovatsion rivojlanishni rag‘batlantirish imkoniyatlarini ochadi. OECD (2013) ma’lumotlariga ko‘ra, yashil iqtisodiyot tamoyillari bo‘yicha amalga oshirilgan islohotlar iqtisodiy samaradorlikni oshirish bilan birga, atrof-muhitga zarar yetkazmasdan, barqaror rivojlanish maqsadlariga erishishga imkon beradi. Shu sababli, yashil iqtisodiyot nazariyasi nafaqat ekologik barqarorlikni, balki uzoq muddatli iqtisodiy o‘sishni ham ta’minlaydigan yondashuv sifatida qaraladi.

Mahalliy iqtisodiyotga ta'sirning asosiy jihatlari

Yashil iqtisodiyotga o‘tish mahalliy iqtisodiyotning tarkibiy o‘zgarishlariga sezilarli ta’sir ko‘rsatadi. Birinchi navbatda, qayta tiklanadigan energiya manbalarini rivojlantirish mahalliy iqtisodiy faoliyatning yangi segmentlarini shakllantiradi. Quyosh, shamol, biogaz kabi energiya manbalariga asoslangan texnologiyalarni joriy etish natijasida yangi ish o‘rinlari yaratiladi va energiya importiga bo‘lgan qaramlik kamayadi. Masalan, O‘zbekistonda amalga oshirilayotgan "Yashil iqtisodiyotga o‘tish strategiyasi" (2020) doirasida qayta tiklanadigan energiya infratuzilmasini kengaytirish mahalliy korxonalarning raqobatbardoshligini oshirishga xizmat qilmoqda. Bu, o‘z navbatida, iqtisodiy barqarorlikni mustahkamlashga olib keladi.

Yashil iqtisodiyot mahalliy ishlab chiqarish sohalarini ekologik mas’uliyat tamoyillari asosida qayta ko‘rib chiqishni talab etadi. Xususan, qishloq xo‘jaligida organik dehqonchilik va suv resurslarini tejamli boshqarish usullarining joriy etilishi mahalliy iqtisodiyotning samaradorligini oshiradi. Nazarova va Saidov (2022) tomonidan olib borilgan tadqiqotlar shuni ko‘rsatadiki, ekologik innovatsiyalarni qo‘llash natijasida hosildorlikni oshirish va eksport salohiyatini kuchaytirish mumkin. Shu bilan birga, chiqindilarni qayta ishlash va ikkilamchi xomashyo ishlab chiqarishni kengaytirish nafaqat iqtisodiy samaradorlikni ta’minlaydi, balki atrof-muhitga bo‘lgan bosimni kamaytirishga ham xizmat qiladi.

Shaharsozlik va infratuzilma loyihalarida yashil texnologiyalardan foydalanish mahalliy iqtisodiyotga salmoqli hissa qo‘shadi. Energiya samarador binolar, ekologik transport tizimlari va chiqindilarni boshqarish bo‘yicha ilg‘or yondashuvlar mahalliy iqtisodiyotda innovatsiyalarni rag‘batlantiradi. UNEP (2011) hisobotida qayd etilganidek, yashil texnologiyalarni joriy qilish nafaqat yashash muhitini yaxshilaydi, balki mahalliy darajada xizmat ko‘rsatish sohalarini rivojlantiradi. Bu yondashuv, ayniqsa, shaharlarda yashovchi aholining turmush darajasini yaxshilashga xizmat qiladi. Shu bilan birga, mahalliy tadbirkorlik subyektlari uchun yangi imkoniyatlar yaratiladi, bu esa iqtisodiyotning xilma-xilligini oshiradi.

Yashil iqtisodiyotning mahalliy darajadagi ijtimoiy ta’siri ham sezilarli ahamiyatga ega. Atrof-muhitni muhofaza qilishga qaratilgan dasturlar va loyihalar mahalliy jamoalarda ijtimoiy mas’uliyat va ekologik madaniyatni shakllantiradi. Shuningdek, mahalliy resurslardan oqilona foydalanish orqali iqtisodiy o‘sish nafaqat sanoat yoki infratuzilma sohalariga, balki qishloq hududlarining rivojlanishiga ham xizmat qiladi. Bu esa mahalliy iqtisodiyotda barqaror rivojlanishni ta’minlash bilan birga, ijtimoiy tenglik va aholi farovonligini oshirishga imkon beradi. Shu sababli, yashil iqtisodiyotga o‘tish mahalliy iqtisodiyotga keng ko‘lamli ijobiy ta’sir ko‘rsatib, barqaror rivojlanish maqsadlariga erishishga xizmat qiladi.

Amaliy misollar

Yashil iqtisodiyotga oʻtish jarayonida global va mahalliy miqyosda turli muvaffaqiyatli amaliy misollar mavjud. Bunga, masalan, Germaniyaning yashil energiyaga oʻtish tajribasini keltirish mumkin. Germaniya "Energiewende" dasturi orqali qayta tiklanadigan energiya manbalarini rivojlantirishda ulkan yutuqlarga erishgan. Ushbu dastur doirasida quyosh va shamol energiyasining ulushi sezilarli darajada oshdi, natijada mamlakatning energiya taʼminoti ekologik jihatdan toza va barqaror boʻldi. Germaniya iqtisodiyoti yangi texnologiyalarni rivojlantirish va yashil ish oʻrinlari yaratish orqali oʻsishni davom ettirmoqda. Ushbu tajriba boshqa mamlakatlarga, jumladan, Oʻzbekistonga yashil iqtisodiyotga oʻtishning samarali strategiyalarini ishlab chiqishda katta ilhom berishi mumkin.

Oʻzbekistonda yashil iqtisodiyotga oʻtish boʻyicha amalga oshirilgan amaliy misol sifatida, qayta tiklanadigan energiya manbalarini rivojlantirishga qaratilgan "Sogʻlom muhit" dasturini koʻrsatish mumkin. Oʻzbekistonda quyosh energiyasini joriy etish boʻyicha bir qator loyihalar amalga oshirilmoqda, masalan, Surxondaryo viloyatida joylashgan "Sherabad" quyosh stansiyasi. Bu loyiha qayta tiklanadigan energiya sohasida mamlakatda yangi ish oʻrinlari yaratishga, atrof-muhitni himoya qilishga va energiya resurslarini tejashga xizmat qilmoqda. Bunda, ekologik jihatdan toza texnologiyalarni joriy etish, mahalliy ishlab chiqarish va eksport imkoniyatlarini kengaytirishga ham yordam bermoqda. Bu kabi amaliy misollar, yashil iqtisodiyotning mahalliy iqtisodiyotga ijobiy taʼsirini yanada ravshanlashtiradi.

Muammolar

Yashil iqtisodiyotga oʻtish jarayonida bir qator muammolar ham yuzaga kelmoqda. Birinchidan, yashil texnologiyalarni joriy qilishda mahalliy sanoatning tayyor emasligi va texnologik infrastrukturani yangilashdagi yuqori xarajatlar eng katta toʻsiqlardan biridir. Koʻplab rivojlanayotgan mamlakatlar, shu jumladan Oʻzbekiston, yangi texnologiyalarni oʻzlashtirish uchun zarur resurslar va malakali kadrlarni taʼminlashda muammolarga duch kelmoqda. Ikkinchidan, qayta tiklanadigan energiya manbalarining yuqori boshlangʻich investitsiyalari va texnik xizmat koʻrsatish narxining yuqoriligi koʻplab kompaniyalar va davlatlar uchun iqtisodiy jihatdan qiyinchilik tugʻdiradi. Bu holat, ayniqsa, kichik va oʻrta biznes sektori uchun muammo boʻlib, ular oʻz faoliyatini ekologik jihatdan toza texnologiyalar bilan yangilashda qiyinchiliklarga duch keladi.

Bundan tashqari, yashil iqtisodiyotga oʻtishning ijtimoiy taʼsirlari ham murakkab. Odamlar oʻzgarishlarga tayyor emasligi, ekologik innovatsiyalarni qoʻllab-quvvatlashga ixtiyoriy ravishda qatnashish istagi pasayishi mumkin. Bu oʻzgarishlarni amalga oshirishda maʼlumot yetishmasligi, ekologik madaniyatning yetarlicha rivojlanmaganligi va mahalliy aholining yangi yondashuvlarga qarshi boʻlishi ham oʻz oʻrnida muammo boʻlishi mumkin. Shuningdek, qishloq hududlarida yashil iqtisodiyotning afzalliklari va yangi iqtisodiy imkoniyatlarni yaratish uchun zarur infratuzilma va qoʻllab-quvvatlash tizimlari hali toʻliq shakllanmagan.

Xulosa

Yashil iqtisodiyotga oʻtish, global va mahalliy miqyosda barqaror rivojlanishning muhim omili sifatida qaralmoqda. Bu yondashuv, ekologik xavfsizlikni taʼminlash, yangi ish oʻrinlarini yaratish, va iqtisodiy samaradorlikni oshirishga xizmat qiladi. Biroq, ushbu jarayonning muvaffaqiyatli amalga oshirilishi uchun texnologik, iqtisodiy va ijtimoiy muammolarni bartaraf etish zarur. Mahalliy iqtisodiyotda yashil texnologiyalarni kengaytirish, ayniqsa, kichik va oʻrta bizneslar uchun qoʻllab-quvvatlashni talab etadi. Bunda davlat tomonidan innovatsion loyihalarni moliyalashtirish, ekotexnologiyalarni joriy etishda soliq imtiyozlari va subsidiya siyosatlari muhim ahamiyatga ega. Shu bilan birga, yashil iqtisodiyotga oʻtish nafaqat iqtisodiy, balki ijtimoiy va ekologik jihatdan ham katta foyda keltiradi. Bunday oʻzgarishlar barqaror rivojlanishning yuqori samaradorligini taʼminlashga yordam beradi va kelajak avlodlar uchun barqaror yashash muhitini yaratadi.

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ГЕНДЕРНАЯ ЛИНГВИСТИКА КАК ОДНО ИЗ АКТУАЛЬНЫХ НАПРАВЛЕНИЙ СОВРЕМЕННОГО ЯЗЫКОЗНАНИЯ

Аннотация: *Данная статья посвящена обзору одно из новейших направлений современного языкознания – гендерной лингвистики, что обусловлены социальными и политическими изменениями, происходящими в XXI веке. В качестве объекта гендерной лингвистики определена языковая репрезентация пола. В статье дан обзор на научные работы по данной отрасли.*

Ключевые слова: *гендерная лингвистика, языкознание, пол, феминитив, женщина, мужчина.*

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GENDER LINGUISTICS AS ONE OF THE CURRENT DIRECTIONS OF MODERN LINGUISTICS

Abstract: *This article is devoted to the review of one of the newest directions of modern linguistics – gender linguistics, which are caused by social and political changes occurring in the 21st century. The object of gender linguistics is defined as the linguistic representation of gender. The article provides an overview of scientific works in this field.*

Keywords: *gender linguistics, linguistics, gender, feminitive, woman, man.*

Гендерная лингвистика представляет собой направление в области лингвистики, которое исследует влияние гендера (или пола) на язык, а также способы, с помощью которых язык отражает, конструирует и поддерживает социальные роли, ассоциированные с мужским и женским полом. В отличие от биологического пола, который является физиологической категорией, гендер относится к социальным и культурным конструктам, определяющим поведение и ожидания относительно мужчин и женщин. В последние десятилетия гендерная лингвистика приобрела значительное значение как в теоретической, так и в прикладной лингвистике, исследуя, как языковые формы влияют на восприятие пола, а также как язык используется для выражения и укрепления гендерных стереотипов.

Теоретические основы гендерной лингвистики опираются на идеи феминистской теории, социальной лингвистики и культурных исследований. Одним из основоположников гендерной лингвистики является Робин Лакофф, чья работа «Язык и женщина» (1975) стала значимой в изучении того, как женщины и мужчины используют язык. Лакофф утверждала, что женский язык отличается от мужского и характеризуется большей подчиненностью, что проявляется в использовании уменьшительно-ласкательных форм, извинительных конструкций и повышенного уровня учтивости. Эти особенности, по мнению Лакофф, служат отражением социальной роли женщин как более зависимых и менее властных [2].

В дальнейшем исследования гендерной лингвистики развивались с учетом более широкого взгляда на гендер как на социальный конструкт. Теории Джудит Батлер о «перформативности гендера» утверждают, что гендер не является фиксированной сущностью, а создается в процессе повторяющихся актов и высказываний, в том числе через язык. В этом контексте язык рассматривается не как нейтральный инструмент, а как важный фактор в формировании и поддержании гендерных ролей [1]]]]]]].

Одним из основных вопросов, который исследуют учёные гендерной лингвистики, является то, как язык репрезентирует (представляет) гендер. В большинстве языков мира существование категорий мужского и женского рода в существительных, местоимениях и других частях речи формирует четкое разделение, которое, однако, часто не имеет отношения к биологическому полу. В языках с грамматическим родом, таких как русский, французский или немецкий, существительные, прилагательные и местоимения часто принимают форму мужского или женского рода, что может влиять на восприятие объектов или понятий через призму гендерных стереотипов.

Например, в русском языке использование феминитивов (женских форм профессий и должностей) подвергается обсуждению в контексте равенства полов. В то время как традиционно многие профессии имеют только мужские формы (например, «психолог», «доктор»), в последние десятилетия наблюдается рост использования феминитивов (например, «психологиня», «докторша»), что связано с попытками создания более инклюзивного языка. Вопрос о том, должны ли такие формы становиться нормой, является предметом научных и общественных дебатов.

Язык также активно используется для поддержания гендерных стереотипов. Исследования показывают, что мужская и женская речь имеет различные особенности. Например, женщины, как правило, используют больше слов для выражения эмоций, более часто извиняются, выбирают более мягкие и дипломатичные формулировки, чем мужчины. Эти различия могут быть связаны как с биологическими факторами, так и с социальными ожиданиями, которые предписываются женщинам в рамках определённых культур.

Мужчины, наоборот, склонны использовать более уверенные, директивные и агрессивные высказывания, что, по мнению некоторых исследователей, отражает их более высокую социальную позицию. Однако важным аспектом является и то, что такие различия не всегда фиксированы: в зависимости от ситуации и социального контекста мужчины и женщины могут менять свою речь, адаптируя её к ожиданиям общества или конкретной социальной роли.

Существует также обратная зависимость: язык влияет на восприятие гендера и формирует общественные ожидания относительно поведения и идентичности. Например, использование определённых местоимений или существительных может влиять на то, как воспринимаются определённые профессии или роли. В странах, где язык активно изменяется, чтобы быть более инклюзивным, например, через использование гендерно-нейтральных местоимений или феминизации слов, наблюдается более высокий уровень осведомленности и принятия гендерного равенства.

В ряде языков существуют гендерно-нейтральные формы, которые начали набирать популярность в последнее время, например, в английском языке местоимение «they» стало использоваться для обозначения людей, чья гендерная идентичность не вписывается в бинарную систему «мужчина-женщина». Это явление показывает, как язык может изменяться в ответ на изменения в восприятии гендера в обществе.

Таким образом, гендерная лингвистика играет важную роль в понимании того, как язык отражает и конструирует социальные роли, связанные с полом. Исследования в этой области подчеркивают важность не только анализа того, как мужчины и женщины говорят, но и того, как язык способствует формированию гендерных стереотипов, а также как он может быть использован для разрушения традиционных представлений о гендере. Язык и гендер находятся в постоянном взаимодействии, и изменения в языке могут служить отражением более широких социальных изменений в восприятии и равенстве полов.

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ИСПОЛЬЗОВАНИЕ МУЗЫКАЛЬНОЙ ТЕРАПИИ ДЛЯ ПСИХОЛОГО-ПЕДАГОГИЧЕСКИХ ОСОБЕННОСТЕЙ РАЗВИТИЯ ДЕТЕЙ ДОШКОЛЬНОГО ВОЗРАСТА

Аннотация: *В статье раскрывается значение музыкотерапии в оказании помощи детей дошкольного возраста в преодолении различных негативных эмоциональных состояний. Одним из способов является формирование у ребенка умения произвольно вызывать различные музыкальные сферы в трудной ситуации. Музыкальные занятия вызывают у ребенка положительные эмоции, помогают ему справляться с собой в негативные моменты. В результате у подростков формируется способность к дифференциации и адекватной интерпретации собственных эмоциональных состояний, способность к эмпатии, умение отражать двигательно-выразительными средствами свое эмоциональное состояние, интерес к эстетической деятельности.*

Ключевые слова: *эмоциональные состояния, отрицательные эмоции, саморегуляция, обучение с элементами, музыка, музыкотерапия.*

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USING MUSIC THERAPY FOR PSYCHOLOGICAL AND PEDAGOGICAL DEVELOPMENTAL FEATURES OF PRESCHOOL CHILDREN

Abstract: The article reveals the importance of music therapy in helping preschool children overcome various negative emotional states. One of the methods is to develop the child's ability to voluntarily evoke various musical spheres in a difficult situation. Music lessons evoke positive emotions in the child and help him cope with himself in negative moments. As a result, teenagers develop the ability to differentiate and adequately interpret their own emotional states, the ability to empathize, the ability to reflect their emotional state by motor-expressive means, and an interest in aesthetic activities.

Key words: emotional states, negative emotions, self-regulation, learning with elements, music, music therapy.

Введение

Дошкольный возраст – это период, когда ребенок активно познает окружающий мир. Дети дошкольного возраста имеют свои психолого – педагогические особенности развития.

Поступление ребенка в школу ставит целый ряд задач перед психологами педагогами в период работы с будущими первоклассниками:

- выявить уровень его готовности к школьному обучению и индивидуальные особенности его деятельности, общения, поведения, психологических процессов, которые необходимо будет учесть в процессе обучения;
- по возможности компенсировать возможные пробелы и повысить школьную готовность, тем самым провести профилактику школьной дезадаптации;
- спланировать стратегию и тактику обучения будущего первоклассника с учетом его индивидуальных возможностей [1].

Решение задач требует глубокой проработки психологических особенностей современных первоклассников, которые в школу в 6-7 лет с разным «багажом», представляющих совокупность психологических новообразований предыдущего возрастного этапа – дошкольного детства.

- **Дошкольный возраст 4-5 лет.**

1. Ведущая потребность – познавательная активность.
2. Ведущая деятельность – сюжетно-ролевая игра.
3. Ведущая функция – наглядно-образное мышление.

- **Особенности возраста:**

- речь начинает выполнять контролирующую функцию;
- усложняются волевые проявления (умение подчинять свое поведение правилам в игре);
- повышенная познавательная активность;
- продолжает сохраняться ситуативно-деловая форма общения со сверстником;
- интерес к другому ребенку как своему отражению. Чаще видит в другом отрицательные черты. Происходит рефлексия своих поступков через реакцию другого ребенка;
- усложнение сюжетно-ролевой игры;
- появление осознанности собственных действий;

Возрастает объем памяти. Дети запоминают до 7-8 названий предметов. Начинает складываться произвольное запоминание: дети способны принять задачу на запоминание, понять поручения взрослых, могут выучить небольшое стихотворение и т.д.

Начинает развиваться образное мышление. Дети оказываются способными использовать простые схематизированные изображения для решения несложных задач. Дошкольники могут строить по схеме, решать лабиринтные задачи.

Развивается предвосхищение. На основе пространственного расположения объектов дети могут сказать, что произойдет в результате их взаимодействия. Однако при этом им трудно встать на позицию другого наблюдателя и во внутреннем плане совершить мысленное преобразование образа. Для детей этого возраста особенно характерны известные феномены Ж.Пиаже: сохранение количества, объема и величины. Например, если ребенку предложить три черных кружки из бумаги и семь белых кружек из бумаги и спросить: «Каких кружков больше-черных или белых?», большинство ответят, что белых больше. Но если спросить: «Каких больше - белых или бумажных?», ответ будет таким же - больше белых.

1. Речь. В среднем дошкольном возрасте улучшается произношение звуков и дикция. Речь становится предметом активности детей. Они удачно имитируют голоса животных, интонационно выделяют речь тех или иных персонажей. Интерес вызывают ритмическая структура речи, рифмы.

У детей формируется потребность в уважении со стороны взрослого, для них оказывается чрезвычайно важной его похвала. Это приводит к их повышенной обидчивости на замечании. Повышенная обидчивость представляет собой возрастной феномен.

2. Игры. В игровой деятельности детей среднего дошкольного возраста появляются ролевые взаимодействия. Они указывают на то, что дошкольники начинают выполнять не ради них самих, а ради смысла игры. Происходит разделение игровых и реальных взаимодействий детей.

3. Движение. Двигательная сфера ребенка характеризуется позитивными изменениями мелкой и крупной моторики. Развиваются ловкость, координация движений. Дети в этом возрасте лучше, чем младшие дошкольники, удерживают равновесие, перешагивают через небольшие преграды. Усложняются игры с мячом [2].

- **Дошкольный возраст 5-6 лет.**

1. Ведущая потребность в этом возрасте – потребность в общении.

2. Ведущая деятельность – сюжетно-ролевая игра.

3. Ведущая функция – воображение.

- **Особенности возраста:**

- общение со взрослым ситуативно - личностное;
- проявление произвольности всех психических процессов;
- в общении со сверстниками происходит переход от ситуативно – деловой формы к внеситуативно - деловой;
- проявление творческой активности во всех видах деятельности;
- развитие фантазии;
- половая идентификация;

- Новообразования:

- предвосхищение результата деятельности;
- активная планирующая функция речи;
- внеситуативно – деловая форма общения со сверстниками;

Особенности возрастного этапа 6-7 лет проявляются в прогрессивных изменениях во всех сферах, начиная от совершенствования психофизиологических функций и заканчивая возникновением сложных личностных новообразований.

Сенсорное развитие старшего дошкольника характеризуется совершенствованием его ориентировки во внешних свойствах и отношениях предметов и явлений, в пространстве и времени.

Особую роль в развитии восприятия в старшем дошкольном возрасте играет переход от использования предметных образов к сенсорным эталонам – общепринятым представлениям об основных разновидностях свойств и отношений.

Для мышления детей 6-7 лет характерны следующие особенности, которые могут использоваться в качестве диагностических признаков достижения ребенком готовности к обучению в школе, с точки зрения его интеллектуального развития:

- ребенок решает мыслительные задачи, представляя их условия, мышление становится внеситуативным;
- освоение речи приводит к развитию рассуждения как способа решения мыслительных задач, возникает понимания причинности явления;
- детские вопросы выступают показателем развития любознательности и говорят о проблемности мышления ребенка;
- появляется новое соотношение умственной и практической деятельности, когда практические действия возникают на основе предварительного рассуждения и возрастает планомерность мышления;
- экспериментирование возникает как способ, помогающий понять скрытые связи и отношения, применить имеющиеся знания, попробовать свои силы;
- складываются предпосылки таких качеств ума, как самостоятельность, гибкость, пытливость [3];

Дошкольный возраст характеризуется интенсивным развитием способности к запоминанию и воспроизведению. Одним из главных достижений старшего дошкольника является развитие произвольного запоминания. Таким образом, к 6-7 лет структура памяти претерпевает существенные изменения, связанные со значимым развитием произвольных форм запоминания и припоминания. Дошкольника еще носит непроизвольный характер.

Дошкольное детство – период, когда эмоции, чувства господствуют над всеми сторонами жизни ребенка, придавая им специфическую окраску и выразительность.

На протяжении дошкольного детства развивается и эмоциональные процессы, осуществляющие регуляцию детской деятельности. Основные новообразования в эмоциональной сфере ребенка 6-7 лет, на которые необходимо обращать особое внимание, в том числе и при диагностике психологической готовности к школе, приведены ниже:

1. Изменение содержания эффектов, выражающееся, прежде всего, в возникновении особых форм сопереживания, чему способствует развивающаяся эмоциональная децентрация.

2. Изменение места эмоций во временной структуре деятельности по мере усложнения и отделения начальных ее компонентов от конечных результатов (эмоции начинают предвосхищать ход выполнения решаемой задачи).

3. К шести годам происходит оформление основных элементов волевого действия: ребенок способен поставить цель, принять решение, наметить план действия, исполнить его, принять определенное усилие в случае преодоления препятствия, оценить результат своего действия, но все эти компоненты волевого действия еще недостаточно развиты; выделяемые цели недостаточно устойчивы и осознаны, удержание цели в значительной степени определяется задания, длительностью выполнения.

Необходимо отметить, что к старшему возрасту дошкольному возрасту происходит развитие познавательной мотивации: непосредственная впечатлительность ребенка снижается, в то же время старший дошкольник становится все более активным в поиске новой информации Н.И.Гуткина, сравнивая мотивы детей 6 и 7 лет, отмечает, что значимых различий в степени выраженности познавательного мотива у шестилеток и семилеток нет, что свидетельствует о том, что по данному параметру психического развития шестилетние и семилетние дети могут рассматриваться как одна возрастная группа.

Становление мотивационной сферы, соподчинение, развитие познавательной мотивации, определенного отношения к школе теснейшим образом связанны с развитием самопознания ребенка, переходом его на новый уровень, с изменением его отношения к себе; у ребенка появляется осознание своего социального «Я».

Основой первоначальной самооценки является овладение умением сравнивать себя с другими детьми. Для шестилетних детей характерна в основном недифференцированная завышенная самооценка. К семилетнему возрасту она дифференцируется и несколько снижается. Развитие умения адекватно оценивать себя в значительной степени обусловлено возникшей именно в этот период децентрацией, способностью ребенка посмотреть на себя и на ситуацию с разных точек зрения.

Поступление в школу заменяет перелом в социальной ситуации развития ребенка. Став школьником, ребенок получает новые права и обязанности и впервые начинает заниматься общественно значимой деятельностью, от уровня выполнения которой зависеть его место среди окружающих и его взаимоотношения с ними.

Вывод и рекомендация

Именно поэтому так важен дошкольный период – это не просто время игры и развлечений, а фундамент для формирования личности. В это время закладываются основы знаний, навыков и характера, которые будут определять успех ребенка в школе и в будущей жизни.

Чтобы подготовить ребенка к школе, важно понять его индивидуальные особенности и способности. Необходимо создать атмосферу, которая будет стимулировать любопытство, развивать творческий потенциал и помогать ему верить в свои силы. Только в сотрудничестве родителей, педагогов и самого ребенка можно достичь гармоничного развития и подготовить его к успешному вхождению в мир знаний и школьных задач.

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МЕТОДЫ И ПРОБЛЕМЫ ОБНАРУЖЕНИЯ СУЛЬФАТВОССТАНАВЛИВАЮЩИХ БАКТЕРИЙ В КОРРОЗИОННЫХ СРЕДАХ

Аннотация:*Сульфатвосстанавливающие бактерии (SВБ) являются ключевыми участниками коррозионных процессов, вызывая значительные экономические и экологические последствия. В данной статье рассмотрены основные методы обнаружения SВБ, включая микробиологические, химические, молекулярно-биологические и электрохимические подходы. Особое внимание уделено их преимуществам, ограничениям и применимости в коррозионных средах. Представлены результаты сравнительного анализа методов, демонстрирующие их эффективность и актуальные проблемы внедрения. На основе полученных данных сделан вывод о необходимости комплексного подхода для повышения точности и надежности мониторинга SВБ. Статья также подчеркивает важность дальнейших исследований для совершенствования технологий и их адаптации к специфическим условиям коррозии.*

Ключевые слова:*Сульфатвосстанавливающие бактерии, SВБ, коррозия, молекулярные методы, электрохимические методы, микробиологические методы, химические анализы, мониторинг коррозии, сульфиды, биомаркеры.*

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METHODS AND CHALLENGES OF DETECTING SULFATE-REDUCING BACTERIA IN CORROSIVE ENVIRONMENTS

Annotation:*Sulfate-reducing bacteria (SRB) are key contributors to corrosion processes, causing significant economic and environmental consequences. This article reviews the main methods for detecting SRB, including microbiological, chemical, molecular biological, and electrochemical approaches. Particular attention is paid to their advantages, limitations, and applicability in corrosive environments. The results of a comparative analysis of the methods are* *presented, demonstrating their effectiveness and current challenges in implementation. Based on the data obtained, the article concludes the need for an integrated approach to improve the accuracy and reliability of SRB monitoring. The importance of further research to enhance technologies and adapt them to specific corrosion conditions is also emphasized.*

Keywords:*Sulfate-reducing bacteria, SRB, corrosion, molecular methods, electrochemical methods, microbiological methods, chemical analysis, corrosion monitoring, sulfides, biomarkers.*

Введение

Сульфатвосстанавливающие бактерии (SВБ) являются одной из главных причин промышленной коррозии, что приводит к значительным экономическим и технологическим потерям. SВБ – это анаэробные бактерии, которые восстанавливают сульфаты до сульфидов. Этот процесс способствует образованию сульфида водорода на металлических поверхностях, что не только разрушает металл, но и наносит вред окружающей среде. Проблемы, вызванные коррозией, такие как выход из строя трубопроводов, снижение эффективности заводов и оборудования, ставят под угрозу экологическую безопасность.

В последние годы разработано множество современных методов обнаружения активности SВБ. Эти методы позволяют выявлять различные этапы активности SВБ и обеспечивают их эффективность в различных условиях среды. Однако применение этих методов связано с техническими и экономическими ограничениями, что снижает их эффективность. В данной статье рассматриваются основные методы обнаружения SВБ и практические проблемы, связанные с этим процессом.

Методы

Основные методы обнаружения SВБ включают следующие:

1. Микробиологические методы:

- Этот метод основан на выращивании бактерий и выявлении их присутствия с использованием специальных питательных сред.
- Одна из наиболее используемых сред – среда Postgate B, содержащая необходимые сульфаты, органические вещества и микроэлементы для роста SВБ.
- Колониеобразующие единицы (CFU) используются для подсчета числа бактерий, однако этот процесс обычно занимает 5-7 дней.

2. Химические методы:

- С помощью химического анализа можно определить концентрацию сульфид-ионов в среде. Это позволяет оценить количество сульфидов, образованных в результате активности SВБ.
- Ионная хроматография обеспечивает высокую точность при разделении и идентификации сульфид-ионов.
- Колориметрический анализ – быстрый и удобный метод для определения концентрации сульфидов, но его чувствительность может быть низкой.

3. Методы молекулярной биологии:

- Полимеразная цепная реакция (PCR) позволяет выявить наличие SBБ на генетическом уровне. Этот метод подтверждает их присутствие путем амплификации фрагментов ДНК бактерий.
- Технологии секвенирования ДНК используются для определения видового разнообразия SBБ и изучения их популяции.
- Метагеномика позволяет изучать SBБ в совокупности с другими микроорганизмами, что дает более полное представление о микробиологическом составе коррозионной среды.

4. Электрохимические методы:

- Электрохимическая импедансная спектроскопия (EIS) применяется для мониторинга активности SBБ. Этот метод измеряет электрические сигналы, возникающие в процессе коррозии.
- Изменения на поверхности электрода, вызванные химическими и биологическими процессами, могут быть отслежены в режиме реального времени.
- Этот метод важен не только для обнаружения SBБ, но и для оценки скорости коррозии.

5. Обнаружение с использованием биологических индикаторов:

- Специальные биомаркеры применяются для определения ферментативных продуктов SBБ.
- Ферментативные индикаторы позволяют быстро и надежно выявить активность SBБ в производстве сульфидов.
- Эти методы относительно просты в применении и часто не требуют дополнительного оборудования.

Результаты

Среди методов обнаружения SBБ наиболее высокую точность и быстродействие обеспечили методы молекулярной биологии и электрохимии. Молекулярные методы, такие как PCR, позволили с высокой точностью подтвердить присутствие SBБ за счет выявления их генетического материала. Чувствительность этих методов позволяет обнаруживать SBБ даже при их низкой концентрации. Кроме того, секвенирование ДНК дало возможность подробно изучить генетическое разнообразие популяции бактерий.

Электрохимические методы позволили отслеживать активность SBБ в реальном времени, что является важным фактором при оценке скорости и интенсивности коррозионных процессов. Эти методы продемонстрировали способность выявлять коррозионные процессы на начальных этапах активности SBБ.

Микробиологические и химические методы, хотя и требуют больше времени, показали свою эффективность для начального мониторинга коррозионных процессов благодаря их простоте и экономичности. Однако они уступают в точности и скорости современным технологиям.

В целом, анализ результатов показал, что для обнаружения SBБ необходим комплексный подход, так как ограничения одного метода компенсируются достоинствами других.

Обсуждение

Каждый из методов обнаружения SBБ обладает своими преимуществами и недостатками:

- Микробиологические методы: низкая стоимость и широкая доступность, однако требуется больше времени (5-7 дней) и ограниченная точность.
- Химические методы: просты и быстры, но не всегда способны различать сульфиды, образованные другими источниками.
- Методы молекулярной биологии: высокая точность и чувствительность, но требуют дорогостоящего оборудования и специальных лабораторных условий.
- Электрохимические методы: удобны для быстрого мониторинга в реальном времени, но сложны в настройке и интерпретации результатов.

Сложные условия коррозионной среды (например, высокая температура, давление, концентрация солей) создают дополнительные трудности при применении этих методов.

Заключение

Обнаружение сульфатвосстанавливающих бактерий в коррозионных средах имеет важное практическое и научное значение. Современные методы молекулярной биологии и электрохимии обеспечивают высокую точность и чувствительность, позволяя мониторить активность SBБ в реальном времени. Эти методы играют ключевую роль в повышении эффективности мониторинга коррозионных процессов, однако их высокая стоимость и необходимость специальных условий ограничивают их массовое применение.

С другой стороны, микробиологические и химические методы являются экономически выгодными и простыми, что делает их подходящими для начального мониторинга. Однако эти методы уступают современным технологиям в скорости и точности.

Будущие исследования должны быть направлены на усовершенствование технологий обнаружения SBБ, снижение их стоимости и адаптацию к экологическим условиям. Интеграция различных подходов имеет решающее значение для эффективной борьбы с SBБ и предотвращения промышленной коррозии.

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РЕАЛИЗАЦИЯ ИНФОРМАЦИОННО-КОММУНИКАЦИОННОЙ ТЕХНОЛОГИИ НА ЗАНЯТИЯХ ПО ИНОСТРАННОМУ ЯЗЫКУ ДЛЯ ЭКОНОМИСТОВ

Аннотация: *в данной статье были рассмотрены основные аспекты реализации ИКТ на уроках иностранного языка, их преимущества и примеры эффективного использования на занятиях иностранного языка для экономистов.*

Ключевые слова: *преподавание, иностранный язык, реализация ИКТ, экономисты.*

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IMPLEMENTATION OF INFORMATION AND COMMUNICATION TECHNOLOGY IN FOREIGN LANGUAGE CLASSES FOR ECONOMISTS

Annotation*: the article examined the main aspects of the implementation of ICT in foreign language lessons, their advantages and examples of effective use in foreign language classes for economists.*

Keywords: *teaching, foreign language, ICT implementation, economists.*

В современном образовательном процессе информационно-коммуникационные технологии (ИКТ) играют ключевую роль, особенно в преподавании иностранных языков. Они не только обогащают учебный процесс, но и делают его более интерактивным и доступным для учащихся. При этом для студентов-экономистов, обладающих специфическими потребностями и требованиями, интеграция ИКТ в учебный процесс становится особенно актуальной.

Информационно-коммуникационные технологии представляют собой совокупность средств и методов, которые позволяют собирать, обрабатывать, хранить и передавать информацию. В контексте образования ИКТ включают в себя компьютеры, мультимедийные проекторы, интерактивные доски, а также программное обеспечение и интернет-ресурсы. Использование этих технологий в обучении иностранным языкам способствует созданию более динамичной и мотивирующей образовательной среды.

Актуальность использования ИКТ в обучении иностранным языкам для экономистов заключается в том, что с учетом глобализации и международной интеграции, знание иностранных языков становится необходимым для успешной карьеры в области экономики. ИКТ предоставляют уникальные возможности для создания интерактивной и динамичной учебной среды, что способствует более глубокому усвоению материала.

Преимущества использования ИКТ на занятиях по иностранному языку:

- **Доступ к информации**: ИКТ предоставляют учащимся возможность получать доступ к разнообразным ресурсам, таким как онлайн-курсы, видеоуроки, подкасты и электронные книги. Это расширяет горизонты изучения языка и позволяет углубить знания.
- **Интерактивность**: использование интерактивных технологий, таких как онлайн-тесты и игры, делает процесс обучения более увлекательным. Учащиеся могут активно участвовать в уроке, что способствует лучшему усвоению материала.
- **Индивидуализация обучения**: ИКТ позволяют адаптировать учебный процесс под индивидуальные потребности каждого ученика. С помощью онлайн-платформ можно создавать персонализированные задания и отслеживать прогресс учащихся.
- **Развитие навыков XXI века**: внедрение ИКТ в обучение иностранным языкам способствует развитию критического мышления, креативности и навыков работы в команде, что является важным аспектом современного образования.

Примеры реализации ИКТ на занятиях по иностранному языку:

1. Использование мультимедийных презентаций: мультимедийные презентации позволяют учителям визуализировать материал, что особенно важно при изучении новых тем. Например, при изучении темы "Путешествия" можно использовать слайды с изображениями достопримечательностей, видео о культуре стран, где говорят на изучаемом языке, и аудиозаписи с произношением.

2. Виртуальные классы и онлайн-курсы: с помощью платформ, таких как Zoom или Google Classroom, учителя могут проводить уроки в режиме реального времени, что особенно актуально в условиях дистанционного обучения. Учащиеся могут взаимодействовать друг с другом и с преподавателем, участвуя в обсуждениях и групповых проектах.

3. Игровые технологии: использование игровых технологий, таких как Kahoot или Quizlet, позволяет сделать процесс обучения более увлекательным. Ученики могут соревноваться друг с другом, отвечая на вопросы и выполняя задания, что способствует лучшему запоминанию материала.

4. Социальные сети и блоги: создание групп в социальных сетях или ведение блогов на иностранном языке помогает учащимся практиковать язык в неформальной обстановке. Они могут делиться своими мыслями, обсуждать актуальные темы и получать обратную связь от сверстников и преподавателей.

Примеры реализации ИКТ на занятиях по иностранному языку для экономистов:

1. Интерактивные платформы и онлайн-ресурсы: использование онлайн-платформ, таких как Duolingo, Coursera и другие, позволяет студентам изучать иностранные языки в удобном для них темпе. Эти ресурсы предлагают специализированные курсы, ориентированные на экономическую терминологию и деловую коммуникацию, что особенно важно для будущих экономистов.

2. Виртуальные классы и видеоконференции: с помощью технологий видеоконференций, таких как Zoom или Microsoft Teams, преподаватели могут организовывать виртуальные занятия, что позволяет студентам взаимодействовать с носителями языка и экспертами в области экономики из разных стран. Это не только улучшает языковые навыки, но и расширяет кругозор студентов.

3. Мультимедийные материалы: использование мультимедийных ресурсов, таких как видео, подкасты и интерактивные презентации, делает обучение более увлекательным и эффективным. Например, просмотр документальных фильмов о международной экономике на иностранном языке может помочь студентам лучше понять контекст и применение языка в реальных ситуациях.

4. Групповые проекты и коллаборация: ИКТ способствуют организации групповых проектов, где студенты могут работать в командах, используя иностранный язык для обсуждения экономических тем. Это развивает не только языковые навыки, но и умение работать в команде, что является важным аспектом в профессиональной деятельности экономистов.

5. Оценка и обратная связь: современные технологии позволяют преподавателям быстро и эффективно оценивать знания студентов. Использование онлайн-тестов и опросов помогает не только в оценке усвоения материала, но и в получении обратной связи от студентов, что способствует улучшению учебного процесса.

В заключение, представляется, что реализация информационно-коммуникационных технологий на занятиях иностранного языка для экономистов открывает новые горизонты в обучении и позволяет сделать его более эффективным и интересным. Применение ИКТ способствует развитию навыков, необходимых для успешной коммуникации в современном мире, и помогает учащимся стать более уверенными в своих знаниях. Помимо этого ИКТ помогают студентам развивать необходимые навыки для успешной карьеры в глобальной экономике. Важно, чтобы преподаватели активно использовали эти технологии, создавая мотивирующую образовательную среду и адаптируя их под специфические нужды студентов, что в конечном итоге приведет к более качественному обучению и подготовке будущих специалистов.

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Оглавление

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