## THE MAIN CHARACTERISTICS OF THE DEVELOPMENT OF UZBEKISTAN INDUSTRY NETWORKS Abdikholiqova G.A. Karshi State University

Abstract: The role and role of industrial sectors in the development of the economy, features of territorial organization and economic aspects of the development of industrial sectors in the Republic of Uzbekistan are described in the article. The article also analyzes the factors affecting the development of industrial sectors in the country, inter-sectoral complexes, population employment in the industry, problems and prospective directions of regional development of the sector.

*Key words: Economy, industry, heavy industry, light industry, metallurgy, mechanical engineering, fuel and energy, free economic zone.* 

Introduction. Along with its positive aspects, the rapid development of the globalization process in the world creates unique economic and social problems in the regions. In order to overcome these problems, international organizations, including the twelfth goal of the UN Sustainable Development Program until 2030, specifically set the task of "Ensuring the transition to sustainable consumption and production forms" [17]. These tasks, especially in the regions, require in-depth scientific research on the improvement of industrial sectors and their territorial structure, forecasting and targeted solutions to existing problems.

In the rapid development of the industrial sector in the Republic of Uzbekistan, taking into account the natural resource potential and local characteristics of the regions, a number of reforms are being implemented to place enterprises and improve its territorial structure. According to the 22nd priority direction of the development strategy of the Republic of Uzbekistan for the period of 2022-2026 "Rapid development of the national economy and ensuring high

growth rates", it is necessary to ensure the stability of the national economy and the gross domestic continuing the industrial policy aimed at increasing the share of industry in the product, increasing the production volume of industrial products by 1.4 times, further liberalization of the leading sectors of the industry and the economy, and the issues of completing the transformation processes are defined [3]. In this regard, it is of particular importance to develop the scientific basis for the placement of industrial enterprises in Uzbekistan, which corresponds to the conditions of innovative development, and to improve the regional organization of industrial production. In particular, in the development of industrial production in the territories of the republic, there are problems that are waiting to be solved regarding the effective use of natural and labor resources. Scientific research based on complex economic, system-content, and generalization is of great importance.

Literature analysis and methodology. A number of studies have been conducted by scientists from far abroad, the CIS and Uzbekistan on the development of industrial sectors. In particular, W. Laungardt, A. Weber, A. Lesch, F. Perrou, W. Isard from distant foreign scientists [15, 16], as well as M. K. Bandman, N. N. Kolosovsky, I. M. from the CIS countries. In the scientific works of scientists such as Maergoyz, Yu.G.Saushkin, A.T.Khrushchev, the issues of development of industrial sectors and improvement of territorial structure were studied [7, 8, 10, 12].

With theoretical and practical issues of placement and development of industrial sectors in Uzbekistan Z.M. Akramov, S.K. Ziyodullaev, K.N. Bedrintsev, Sh.N. Zakirov, M.A. Abdusalomov, I.I. Iskanderov, T.M. Ahmedov, E.A. Ahmedov, R.Ya. Dosumov, Sh.B. Imomov, A.N. Ruziev, N.T. Tokhliyev, A.S. Soliyev, A.A. Kayumov, N.S. Sultanov, A.M. Sadikov, A.T. Yusupov and other scientists were involved. In the context of the transition of the economy to market relations, a number of works have been done on the problems of development and territorial organization of industrial enterprises [11, 13].

Special attention is paid to the stable and rapid development of the industry of the Republic and its regions. In particular, Decision PQ-3182 of the President of the Republic of Uzbekistan on the modernization of the economy and industry of the country's regions dated August 8, 2017 "On priority measures to ensure rapid socio-economic development of the regions" [1], Resolution PQ No. 9490 of April 30, 2019 "On measures to further improve the mechanisms of attracting foreign direct investment to the economy of the Republic" [2], April 4, 2022 "2022 Resolution No. 154 [4] of July 22, 2019, "On additional measures for comprehensive socio-economic development of the territories of Khorezm region and further improvement of the living standards of the population" in 2026, "Implementation of investment projects in Fergana region Resolution No. 617 "On Measures to Ensure Structural Change, Modernization and Diversification of Production in 2015-2019" of 2015 Decree No. PF-4707 of March 4 can be an example of this.

**Results and discussion.** In the period of transition to market relations, the regions should have their own and appropriate directions of development and separate programs that implement them on a scientific basis; social and economic development of one region depends more on labor reserves, in another this task can be performed on the basis of rich mineral raw material resources. Another region develops due to its favorable economic geographical location, while another develops based on the excellent infrastructure system created here. Consequently, the directions of development of the industry of the regions are completely different from each other [11, 13].

It is known that the regions of the republic do not have the same natural and economic potential. At the same time, under the influence of various historical, economic and social processes, they went through specific stages of development. For example, until the 1950s, the Lower Amudarya economic region of the republic was not connected with the republic and other regions of the former Soviet Union by modern means of transport - railway. During the Second World War, until more than 200 heavy industrial enterprises were transferred to Uzbekistan in 1940-45, as the republic was transformed into the main cottongrowing region of the former Union, the basis of the republic's industry was light industry, mainly cotton ginning, partly textiles (Tashkent, Ferghana).

After the war, most of the machine-building enterprises diversified into peaceful production, and heavy industries such as agricultural machinery, aircraft engineering, and ferrous metallurgy emerged in the industry of Uzbekistan. In the 60s and 70s of the 20th century, the opening of huge gold and gas fields in Kyzylkum, and later in the Karshi deserts, increased the industrial potential of Bukhara, Navoi, and Kashkadarya regions. The opening of coal and copper mines in Tashkent region also caused the same situation as above. The transport isolation of Lower Amudarya until the middle of the last century had a negative impact on the exploitation of its natural resources and the development of industry. Bukhara, Kashkadarya and Tashkent regions formed the basic branches of industry.

As we have seen above, the negative situations that occurred as a result of the disintegration of the former Union, at the same time, the establishment of new large enterprises in the automotive, gas-chemical, and oil refining sectors have changed the share of the country's regions in industrial production to a certain extent. For example, in Andijan region, the establishment of a passenger car manufacturing enterprise in the city of Asaka (1996), and then the establishment of component supply enterprises on the basis of localization (localization) programs, almost doubled the region's share in the republic's industry (see Table 1).

The volume of industrial production in the republic has been growing steadily since 1996. In 2009, the annual volume of industrial production increased by 2.7 times compared to 1990, and by 3 times in 2010. Between 2010 and 2018, industrial production grew almost 1.6 times. Production modernization, technical and technological re-equipment measures were implemented in all sectors of the country's economy. The measures implemented in the republic are yielding their

results [5, 6]. Analyzes show that industrial production in our republic is developing rapidly during the years of independence. In the last century, except for the beginning of the 90s, it grew by 7-8 percent every year compared to the previous year [14].

Table 1

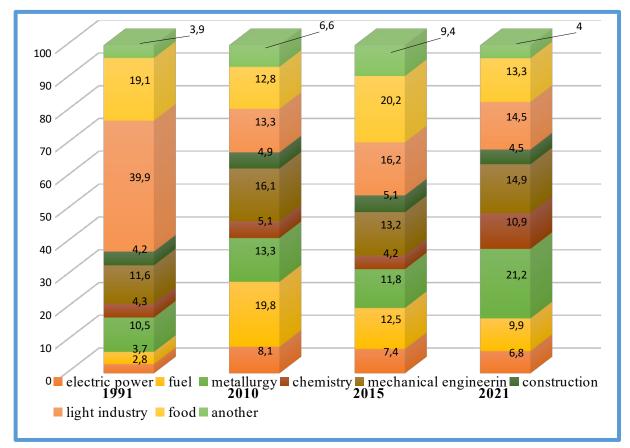
(as a percentage of the total)										
Nº	years administrative regions	1991 y.	1995 y.	2000 y.	2005 y.	2010 y.	2020 y.	2021 y	2022y	Compared to 1991, (+,-)
1.	Karakalpakstan Republic	3,1	2,8	2,5	1,8	1,2	3,8	3,6	3,2	+1,0
2.	Andijan	6,4	5,4	7,7	10,9	12,3	9,9	7,9	9,8	+1,5
3.	Bukhara	5,3	4,1	6,4	4,8	4,4	4,8	4,6	4,9	-0,9
4.	Jizzakh	2,3	1,3	1,2	1,8	1,3	1,6	1,9	2,1	-0,9
5.	Navoi	8,8	8,0	11,8	15,9	9,9	17,7	16,1	15,3	+1,7
6.	Namangan	6,5	4,4	3,9	3,1	2,5	3,0	3,2	3,3	-0,5
7.	Samarkand	7,5	6,2	5,9	3,6	4,8	5,0	5,0	5,3	-0,7
8.	Syrdarya	2,8	2,9	3,3	2,8	1,3	2,2	2,2	2,2	-0,8
9.	Surkhandarya	3,4	2,3	2,4	2,0	1,8	1,4	1,5	1,3	-0,4
10.	Tashkent	14,5	19,2	16,1	16,7	12,7	17,9	18,3	17,0	+1,2
11.	Ferghana	13,1	16,4	12,1	9,6	8,3	5,9	6,1	5,5	-0,4
12.	Khorezm	3,6	3,8	2,8	1,9	1,6	2,6	3,0	3,3	-0,9
13.	Kashkadarya	6,4	5,5	7,2	13,4	10,3	4,0	4,1	4,1	-0,6
14.	Tashkent city	16,3	17,1	16,7	11,6	19,5	17,9	19,8	19,7	+1,2

Territorial structure of industrial production of Uzbekistan (as a percentage of the total)

The table was compiled based on the information of the State Statistics Committee of the Republic of Uzbekistan.

It is noteworthy that the growth indicators of the industry have been higher than the level of the gross domestic product in some years. In this period, in particular, mechanical engineering and metal processing, chemistry and petrochemicals were rapidly developed. In cooperation with foreign companies, the Bukhara Oil Refinery (Technip, France), Shu'rtan, Ustyurt gas-chemical complex (ABB, Korgaz), Kandim gas processing complex (Lukoil, Russia) were established, Fergana Oil Refinery was completely reconstructed. The establishment of the gas-chemical network made it possible to deepen the processing of natural gas and develop new production capacities in related industries. In the chemical industry, the Kungirot calcium soda plant was launched in 2006, and the Dehkhanabad potash fertilizer plant was launched in 2010. As a result, the share of the republic's industry in the gross domestic product increased from 16.2 percent to 26.7 percent in the period 2000-2022. Metallurgy, which is one of the main branches of the republic's industry, has doubled its share in the industry, reaching 21.2 percent by 2021. The main facilities of the network are located in Tashkent and Navoi regions.

In 1991, the highest share of the republic's industrial production - 39.9 percent was light, 19.1 percent was food industry. Currently, these figures are 14.5 and 13.3 percent, respectively. Due to the one-sided development of the country's industry during the former Union, the share of light industry was high, about 60% of its volume corresponded to the cotton ginning industry [9]. In recent years, the share of machine building, food and non-ferrous metallurgy industries in the country's industrial sectors is increasing. It can be concluded that the composition of industrial sectors is developing and diversifying (see Figure 1).



## Figure 1. Composition of branches of the republic's industry (in percent).

The picture was compiled by the author based on the data of the Statistical Committee of the Republic of Uzbekistan.

At present, the largest share in the industrial production of the republic belongs to the Tashkent region. Together with the city of Tashkent, they account for 37-38 percent of the republic's gross industry (see Table 1). Restoration and modernization of old industrial facilities (coal industry, machinery industry, transformers, overhead crane production lines, television, electrical engineering (copper cable)) and establishment of thousands of new facilities in the small business sector led to the restoration of the previous potential of the Tashkent economic region. Tashkent city and region are ahead in terms of the number of industrial enterprises and the number of newly established enterprises every year.

Industry plays a very important role in the country's economy and employment. In order to create the necessary conditions for this industry, 19 free economic zones and more than 400 small industrial zones were established in recent years. Also, a large amount of financial resources have been allocated to turn industries such as textiles, chemistry, building materials, leather, pharmaceuticals, electrical engineering into "drivers". In order to supply the industry with raw materials, geological exploration works were increased three times and more than 600 new mines were discovered.

As a result, in the last five years, the number of industrial enterprises has doubled to 100,000, and the production volume has increased by 1.4 times. This has a positive effect on the development of these regions. In particular, new sectors such as building materials, automobile industry, food industry, which did not exist before, have appeared in Jizzakh. 220 construction materials projects have been launched, and the share of this industry in the regional industry has exceeded 20 percent. 19 large metal processing projects have been implemented in Samarkand, Syrdarya, Namangan and other regions. In the last three years, the volume of production in the chemical industry has increased by 1.5 times, and exports by 2 times. At the same time, in some regions, the results are not at the level of potential. In particular, in 2022, the growth of industry in Navoi, Bukhara and Tashkent regions was average. In the Republic of Karakalpakstan, Jizzakh, Kashkadarya, Surkhandarya, Fergana and Khorezm, the level of yarn processing remains low. In Namangan, Samarkand and Navoi, the production potential of food, leather-shoes and furniture has not been sufficiently utilized.

## CONCLUSION

In the territorial structure of Uzbekistan's industry, the industrial production of the Republic of Karakalpakstan, Khorezm, Surkhandarya, Syrdarya, Jizzakh regions is very low. Taking into account the internal capabilities of these regions, creating a favorable investment space, establishing joint ventures, and identifying growth points and centers is of great importance in the development of the country's industry. If we look at the area of industrial incorporation in the regions, the level of industrial incorporation is high in Andijan, Fergana, and Tashkent regions. In terms of industrial production per capita, Navoi region, Tashkent city, Tashkent region, Andijan region have a relatively high index.

It should be noted that there are enough opportunities for the development of various branches of industry in the republic. Therefore, it is appropriate to choose the strategic directions of industrial production based on the existing capabilities of the country. This serves as a basis for the full formation of the national economy. The level of economic development of regions cannot be seen in the development of only one branch of industry. Consequently, the distribution and diversification of regions by sectors is also reflected in their diversity.

## REFERENCES

1. Decision PQ-3182 of the President of the Republic of Uzbekistan dated August 8, 2017 "On priority measures to ensure rapid socio-economic development of regions".

<sup>2.</sup> Decision PQ 9490 of the President of the Republic of Uzbekistan dated April 30, 2019 "On measures to further improve the mechanisms of attracting foreign direct investment to the economy of the Republic".

3. Decree No. PF-60 of the President of the Republic of Uzbekistan dated January 28, 2022 "On the development strategy of New Uzbekistan for 2022-2026".

4. Resolution No. 154 of the Cabinet of Ministers of the Republic of Uzbekistan dated April 4, 2022 "On additional measures for comprehensive socio-economic development of the territories of Khorezm region in 2022-2026 and further improvement of the living standards of the population".

5. Mirziyoyev Sh.M. We will build our great future together with our brave and noble people. - Tashkent: Uzbekistan, 2017. - 488 p.

6. Mirziyoyev Sh.M. We will resolutely continue our path of national development and raise it to a new level. - Tashkent: Uzbekistan, NMIU, 2017. – 592 p.

7. Kolosovsky N. N. Izbrannye trudy. - Smolensk.: Oikumena, 2006. - 336 p.

8. Maergoyz I.M. Territorialnaya struktura hozyaystva. - Novosibirsk: Nauka, Sibirskoe otdelenie, 1986. - 300 p.

9. Mamatov A. The composition of the gross domestic product of the Republic of Uzbekistan and its growth factors. - T.: Economy - Finance, 2006. - 163 p.

10. Porter M. Competitive strategy. Methodology analysis otrasle i konkurentov. - M.: Alpina Business Books, 2005. - 454 p.

11. Sadykov A.M. Osnovy regionalnogo razvitiya: theory, methodology, practice. - T.: ECONOMY-FINANCE, 2005. - 280 p.

12. Saushkin Yu.G. Economic geography: history, theory, methodology, practice. - M.: Mysl, 1973 - 559 p.

13. Soliev A., Karshiboeva L. Regional problems of industrial production (in the example of Syrdarya region). - Gulistan: 2001. - 98 p.

14. Main trends and indicators of economic and social development of the Republic of Uzbekistan in the years of independence (1990-2010) and forecasts for 2011-2015. - T.: Uzbekistan, 2011. - 138 p.

15. James H. Stock, Mark W. Watson. Introduction to econometrics. 4th Edition.

16. <u>Marno Verbeek</u>. A Guide to Modern Econometrics, 5th Edition. Hoboken, NJ: John Wiley & Sons, Inc., (2004), pp. 255-290.

17. Goal 12. Ensure sustainable consumption and production patterns. Department of Economic and Social Affairs Sustainable Development.

https://www.un.org/sustainabledevelopment/sustainable-consumption-production/

18. Abdiholiqova G.A. Scientific-methodical basis of industrial geography of Uzbekistan. Proceedings of International Conference on Modern Science and Scientific Studies Hosted online from Paris, France. Date: 19th December, 2023. P. 352-356.

19. Abdiholiqova G.A. Scientific-theoretical bases of regional location of industrial sectors. international multidisciplinary journal for research & development. Volume 10, issue 12 (2023). P. 443-446.

20. Faizullaev M.A. Theoretical and methodological aspects of the economic geographical study of agriculture and the use of land and water resources // Eurasian Journal of History, Geography and Economics. Volume 16, Belgium, 2023. - P. 39- 42.

21. Faizullaev M.A. Factors of intensive development of agriculture in ensuring food security, Web of Scientist: International Scientific Research Journal, 2023. Vol. 4, No. 1. P. 715-719.