

GEOGRAPHIC APPROACH TO THE DEVELOPMENT OF THE NETWORK OF CHEMICAL INDUSTRY OF UZBEKISTAN

Annotation: The article deals with the economic and geographical aspects of the development of the chemical industry in Uzbekistan. It focuses on the role of the chemical industry in the economy, prospects, industries, related aspects of agriculture, the main types of products in the industry, the dynamics of mineral fertilizers production, export and import geography.

Key words: chemical industry, chemical products, industrial complex, mineral fertilizers, nitrogen, phosphorus, potash fertilizers, ammonia production, urea production, export, import.

Introduction. Today, one of the leading sectors of the economy of Uzbekistan is the chemical industry with significant production, raw materials and scientific and technical potential. This industry is making an important contribution to the development of the economy and export potential of the Republic.

To further diversify the chemical industry, to attract direct investment in the creation of new productions and to expand the range of products with added value, which are in high demand in the domestic and foreign markets, to create a modern scientific and design base with the involvement of leading foreign institutions, in addition, in order to increase the financial stability of "Uzkimyosanoat" JSC, decisions of the president of the Republic of Uzbekistan "On measures for the rapid development of the chemical industry of the Republic of Uzbekistan" PD-3983-th and "On measures for further reform of investment attractiveness of the chemical industry" PP-4265-th were adopted on October 10, 2018 [1; 2]. It can be seen from these that today the further development and improvement of the territorial and sectoral composition of the chemical industry in Uzbekistan is considered one of the urgent tasks. Because at the same time, the reduction of the

world's natural resources and the rapid growth of the number of its population are of great importance in the provision of employment and consumer products to carry out economic geographic research on the development of industrial production, in particular, the network and territorial composition of the chemical industry.

The main part. It is known that after Uzbekistan was established as an independent state, it gained freedom in all spheres, in particular in the sphere of industry. In this period Range, state-owned companies were formed, depending on the type of products they produce at industrial enterprises in the country, and to them, this or that network of industries was merged [6]. In particular, it is possible to cite as an example the “Society of self-industry” (founded in 1994 as a state consul of “self-industry”), which unites chemical industry enterprises on the basis of a government decision.

JSC "Uzkimyosanoat" can be divided into the following main production complexes depending on the type of products produced industrial enterprises:

- production complex of energy, gold mining, mineral fertilizers for the chemical industry, inorganic chemical reagents;
 - production complex of organic chemistry, artificial fibers, polymer materials;
 - means of chemical protection of plants and production of soda water, etc.
- [4].

Today, JSC "Uzkimyosanoat" produces more than 170 kinds of chemical products. In 2017, the market of enterprises of JSC "Uzkimyosanoat" produced 2.7 trillion soums of products sold at current prices. Production of mineral fertilizers in the specified period amounted to 1.14 million tons (100 percent annual), including nitrogen fertilizer production was 854,81 thousand tons, phosphorus fertilizers- 119,09 thousand tons, potash fertilizers - 168,0 thousand tons, while the product exposition forecast was fulfilled by 129 percent [4].

In 2018, the current prices in the market of enterprises of JSC "Uzkimyosanoat" amounted to 4.17 trillion TL. som produced products for sale.

The production of mineral fertilizers in the specified period is 1170,77 thousand tons (100 percent per annum), including:

Fertilizer-847,98 thousand tons of own;

Fertilizers with phosphorus - 14380, thousand tons per year;

Fertilizer - 18,41 thousand tons of lake water.

By the end of this year, 884,66 thousand tons of mineral fertilizers were sold in birja trade. The forecast for products expoorti was fulfilled by 100 percent.

In order to implement government decisions, it is planned to implement a number of investment projects aimed at increasing the production capacity and production of ammonia, urea, ammonium nitrate in chemical industrial enterprises. In particular, according to the decision of PD-4265 "On measures to further reform the investment attractiveness of the chemical industry" of April 3, 2019, it is envisaged to implement a project to build a plant producing ammonia and urea in the city of Yangier of Sirdarya region. As a result of the project to build a plant producing ammonia and urea in Yangier, sirdarya region, the production of urea is carried out later, ammonia is used only to meet its own needs and is fully used in the production of urea [2].

Each region, which is part of the territory of the Republic of Uzbekistan, is organized on the basis of certain object laws. They differ from each other by geographical and territorial location, the composition of the economy, the level of development and specialization of industry and agriculture, etc. [5,6].

The formation of industrial sectors in Uzbekistan was formed on the basis of Agriculture from ancient times (mainly cotton and pillage). In particular, the establishment of chemical industrial enterprises is also directly related to agricultural production (cotton). The chemical industry is particularly important in providing pakhtachilikni mineral fertilizers [5, b. 103]. In particular, enterprises specializing in the production of mineral fertilizers in Uzbekistan are located mainly in Tashkent region (Chirchik city), Fergana region (Fergana city). At present, the strategy for 2020-2030 on the production of agricultural products and development of Agriculture in Uzbekistan is being discussed. The agricultural

network of the Republic is one of the main consumers of nitrogen fertilizers, the situation in the fertilizer market of the Republic due to the breadth of supply in relation to demand, local enterprises have the opportunities and potential to export products produced through modernization and commissioning of existing production capacities. All this eventually leads to an increase in the specific consumption of crop fields and Fertilizers. By 2030, it is planned to increase the productive area by 26 percent (on the account of repeated planting), as well as re-use of land among agricultural crops [3].

Thus, the crop area should increase from 3,904 to 4,903 thousand in 2030 compared to 2017 year. This will lead to an increase in yields by 2030 by 15-90 percent, depending on the type of agricultural crops, according to the optimistic forecast of the World Bank. In order to ensure the crop, known to farmers, by 2030 year the target consumption of fertilizers is 370 kg/ha (of which 185 kg/ha nitrogen fertilizers). In 2017, this figure amounted to 219 kg/ha (nitrogen fertilizers to 166 kg/ha) [4]. Currently, there are two large enterprises producing ammonia and urea in Uzbekistan, these are “Fergonaazot” JSC in Fergana region and “Maksam-CHirchiq” JSC in Tashkent region (Table 1).

The main consumers of urea are local agricultural producers, which are provided by the JSC “Uzagrokimyohimoya”.

Uzagrokimyohimoya JSC, in turn, participates in the birja trade and buys the necessary fertilizer for agricultural needs.

Ammonia consumers are Republican enterprises specializing in the production of chemical products. At present, the country's need for this product is 2,0 million tons per year.

The highest demand for urea from agricultural producers in 2016 year (417 thousand tons), the demand declined in 2017 year, shipping amounted to 343.8 thousand tons [4].

1-table

Dynamics of production of ammonia and urea (thousand tons) in 2013-2018 years at JSC “Uzkimyosanoat” enterprises)

Product name	2013 y.	2014 y.	2015 y.	2016 y.	2017 y.	2018 y.
“O’zkimyosanoat” JSC						
Ammonia-total	1 307,5	1 420,1	1 370,0	1 386,9	1 288,9	1 275,9
Urea total (h.q.100 percent)	480,2	583,9	586,9	636,3	598,4	528,7
<i>Including:</i>						
“Maxsam-CHirchiq” JSC						
Synthetic ammonia	590,2	546,2	488,1	506,9	522,9	528,4
Urea (h.q. 100 percent)	260,5	248,0	225,8	254,8	271,7	251,0
“Farg’onaazot” JSC						
Synthetic ammonia	247,1	387,9	417,5	452,5	384,3	337,8
Urea (h.q. 100 percent)	219,7	335,8	361,1	381,5	326,7	277,7
Synthetic ammonia	470,2	486,1	464,4	427,5	381,7	409,6

The table was developed by the author on the basis of the information provided by JSC ”Fergonaazot”.

Table 1 shows the actual production of ammonia and urea at the enterprises of the Republic of Uzbekistan in 2013-2018 years. It should be noted that the production of ammonia is mainly directed to the personal needs of enterprises and is used as a raw material for the production of mineral fertilizers.

The largest indicator of urea production in 2016 year (636,3 thousand tons) was observed when the total weight of 598,4 thousand tons (2017 year) and 528,7 thousand tons (2018 year) of urea were produced at the enterprises of JSC ”Maxam-Chirchik“ and JSC ”Fergonaazot”. In 2018 year, JSC “Fergonaazot” observed a decrease in the total volume of urea due to a decrease in urea production from 326,68 thousand tons to 277,7 thousand tons. Today, a large part of the production of urea corresponds to the contribution of JSC “Fergonaazot”.

In addition, in the concept of development strategy of the Republic of Uzbekistan until 2035, developed by the international non-profit organization

”great future”, presented analytical information on the chemical industry. The production of mineral fertilizers is higher than the average demand within the country by 40-50 percent. A large part of the mineral fertilizers produced as a result are exported. Export growth in the program of development of the chemical industry prepared by JSC ”Uzkimyosanoat” for 2018-2030 years is projected from 185,6 million dollars in 2018 to 742,4 million dollars in 2030. The main importers of chemical products are China, Russia, Kazakhstan and Turkey [3].

In 2017, the Republic was imported ammonia worth 3,71 thousand US dollars, at the same time Turkey was the only importing country (100 percent imported). By volume of money, the volume of exports amounted to 5,32 million dollars, mainly exported to Kazakstan (99.8 percent).

In 2017, the importation of nitrogen fertilizers to the Republic amounted to 700.0 thousand US dollars, 69 percent of which came from Kyrgyzstan, 18 percent from Turkey, 6.6 percent from Russia, 2.8 percent from Lithuania and Germany. During this period, nitrogen fertilizers worth 80,1 million dollars were exported, the share of fertilizers sent to Ukraine was 43 percent.

In 2018, 24 percent of this figure was exported to Kyrgyzstan, 23 percent to Kazakstan, and about 7 percent to India, Malaysia and Turkey [4].

Conclusion. Based on the data and analysis studied above, the following conclusions and suggestions can be put forward, namely:

- first of all, in order to meet the demand for consumer products, in addition to increasing the population day by day and, on the contrary, reducing land resources, further expansion and diversification of the type of production of chemical products in the Republic, the implementation of investment projects in this area;

- secondly, to develop, implement and improve the management system of the state in order to meet the demand of agriculture for chemical mineral fertilizers by further strengthening the links between the ”self-employment“ and ”self-employment” JSC;

- third, deepening the participation of the country in international labor distribution with chemical products on the basis of further improvement of

international communication systems and effective use of favorable geostrategic position, further development of interaction with close and distant foreign countries by going kengaytirib its geography, etc.

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