

FORMATION AND DEVELOPMENT OF HEAVY INDUSTRY SECTORS IN THE SURXONDARYO REGION

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Abstract. Surkhandarya region is located in the southernmost part of our country and is one of the regions best endowed with natural resources in our country. Surkhandarya region is distinguished by its diversity of natural resources, including minerals, from various ores to oil and gas deposits, coal and the largest salt deposit in our country. This article provides a detailed analysis of the role of the region's natural resources in the development of industry in the region.

Keywords: natural resource, industry, resource, coal, oil and gas.

Due to the fact that the Surxondaryo region is located in the southernmost and most remote part of the country and has long been regarded as an agricultural area, industrial sectors in the region have developed much more slowly compared to other regions. Surxondaryo accounts for only about 2–3 percent of the country's total industrial output [5].

Within the structure of the region's industrial sectors, light industry currently occupies a relatively large share. It is well known that the region's rich natural resources form a raw material base for heavy industry, and in recent years the development of large mineral deposits has begun.

Industry is a branch of production that encompasses the processing of raw materials, the exploitation of underground resources, and the production of means of production and consumer goods [3].

As is known, heavy industry is a group of industrial sectors that produce means of production. Heavy industry includes all extractive industries and part of the manufacturing industries. It comprises electric power generation, the fuel industry, ferrous and non-ferrous metallurgy, machine building and metalworking,

the chemical and petrochemical industries, woodworking, pulp and paper production, and the construction materials industry, among others. Heavy industry plays a decisive role in developing the productive forces of a given region and serves as the foundation for expanded reproduction of the national economy, technological modernization, strengthening regional defense capacity, and improving public welfare.

In recent years, fuel, electric power, and metallurgical industries have been developing in the Surxondaryo region, which is the object of this study. Examples include the Khanjiza polymetallic ore deposit, the discovery of the M25 gas field in Boysun district, and the commissioning of several coal and oil fields [5].

Although the first industrial enterprises established in the region belonged to light industry, the commissioning of oil fields related to heavy industry—namely “Xovdog’,” “Uchqizil,” and “Kakaydi”—dates back to the Soviet period. In addition, the commissioning of the Sharg’un and Boysun coal mines also dates to the Soviet era; however, coal extraction volumes at these deposits have increased in recent years. Nevertheless, coal extracted in the region accounts for only 2.5–3 percent of the total coal production of the country. This is due to several factors, including the relatively small reserves of these deposits and the difficulty of their development, as the mines are located in rugged mountainous terrain.

The fuel and energy industry in the region began to take shape in the 1950s with the extraction of oil and gas, and later coal, eventually becoming a separate branch of regional industry. Numerous oil and gas fields have been discovered and commissioned in the Surxondaryo region. The extraction of oil, gas, and coal has been increasing year by year.

At present, the region annually produces 126–130 thousand tons of oil, 220–240 thousand tons of coal, and 17,545 thousand cubic meters of natural gas. In particular, the geography of oil extraction is expanding with the discovery of new promising fields, and oil production volumes continue to grow. However, no oil refining industry has been established in the region. A portion of the extracted oil

is transported to the Bukhara Oil Refinery. This practice increases the cost of various petroleum products obtained through refining for the region. Moreover, the issue of fully meeting the region's demand for petroleum products remains unresolved [1].

The machine-building industry is one of the key driving forces of both industry and the overall economy. Its development is directly linked to the development of the region's productive forces. Unfortunately, this leading industrial sector is poorly developed in Surxondaryo, with only certain branches having taken shape. For example, there are enterprises in Denov that repair various types of agricultural machinery, and factories in Termez that repair tractor engines and produce certain components for agricultural machinery, and little else.

The construction materials industry develops in close connection with the level and scale of capital construction in the regional center, major cities, district centers, and large newly established settlements. From this perspective, it is believed that significant efforts and decisive steps should be taken in the near future.

The natural geographic basis for the development of the construction industry in Surxondaryo includes natural stone, sand, limestone, gravel, gypsum, and other resources. Brick factories established in every district of the region, as well as enterprises producing lime, reinforced concrete (in Termez, Qumqo'rg'on, Surxon, and Denov), marble polishing (Kampirtepa), and gravel production (Sherobod, Jarkurgan cement plant, etc.), constitute the major pillars of the region's construction industry [4].

Chemical production involves the processing of organic and inorganic raw materials and materials through chemical processes, as well as the manufacture of finished products. According to the results for January–December 2024, the share of chemical production within the manufacturing industry amounted to 0.3 percent; the physical volume index compared to the corresponding period of the previous

year reached 193.4 percent; and total production volume amounted to 44.5 billion soums.

In January–December 2024, compared to the corresponding period of the previous year, electricity production reached 149.2 percent, while thermal energy production amounted to 100.0 percent. As shown in Table 2, electricity generation increased from 1.9 million kWh in 2018 to 638.7 million kWh in 2024, indicating significant development of the regional electric power industry. At the same time, thermal energy production has declined, and in recent years new segments—such as electricity generated by solar power plants—have begun to account for a share of the region’s electricity supply. In 2024, the amount of electricity generated by solar power plants in the region totaled 4.6 million kWh.

2- Table. Volume of Energy Industry Production

No.	Industrial products	2018	2020	2022	2024
1	Electricity, million kWh	1,9	0,005	232,3	638,7
2	Thermal energy, thousand Gcal	72,9	33,6	33,6	22,9
3	Electricity generated by solar power plants, million kWh	-	-	-	4,6
4	Diesel fuel, thousand tons	11,7	1,8	-	-
5	Petroleum bitumen, thousand tons			61,1	

Source: *Data from the Surxondaryo Regional Statistics Office (surxonstat.uz)*

In 2010, Jarkurgan district accounted for the largest share of industrial output in the region. It was followed by Termez city, Sho‘rchi, Sherobod, and Denov districts, while the lowest indicators were recorded in Oltinsoy, Boysun, and Termez districts. In the Surxondaryo region, industrial production growth has accelerated since 2020. The total volume of industrial production increased from 756.6 billion soums in 2010 to 12,368 billion soums in 2024. In other words, industrial output in the region increased sixteenfold over this period.

In conclusion, it can be observed that in recent years the structure of industrial sectors and the volume of industrial production in the Surxondaryo region have been increasing. This growth is largely due to more intensive

utilization of the region's rich natural resources and the rising volume of foreign investment, which together have contributed to the expansion of industrial production in the region.

References

1. Abdunazarov H.M. et al. *Geography of Surxondaryo Region. Economic and Social Geography. Part 2. Textbook*. Tashkent: Dimal Publishing, 2024. – 260 p. (in Uzbek).
2. Asanov G. et al. *Economic and Social Geography of Uzbekistan*. Tashkent: Teacher, 1994. – 209 p. (in Uzbek).
3. Baratov P. *Physical Geography of Uzbekistan*. Tashkent: Teacher, 1996. – 264 p. (in Uzbek).
4. Nabiyev E., Qayumov A.A. *Economic Potential of Uzbekistan*. Tashkent: Akademiya, University, 2000. – 88 p. (in Uzbek).
5. Qayumov A. et al. *Regional Economy*. Tashkent: University, 2004. (in Uzbek).
6. Soliyev A. *Economic and Social Geography of Uzbekistan*. Tashkent, 2014. – 268 p. (in Uzbek).
7. Vahobov H., Tillaboeva M. *Fundamentals of Economic Geography*. Tashkent: Teacher, 2001. – 136 p. (in Uzbek).
8. Zokirov O., Pardayev A. *Agricultural Economics*. Tashkent: OAJBNT Center, 2003. – 455 p. (in Uzbek).
9. stat.uz