

FEATURES OF URBAN AREAS FORMATION IN THE INDUSTRIAL AREAS OF UKRAINE

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Keywords: aspects of functional and spatial structure of land use, economic preconditions for the emergence and development of urban agglomerations, intensive industrial development in mining regions, functional zoning of urban areas, socio-economic development of the mining and industrial regions.

The problem statement. The phenomenon of the city in modern science has numerous interpretations. One of them is interpretation of the city as a land-use system that generates and by which the material and spatial preconditions of human life are implemented. Traditionally, the subject of study here are the regularities of spatial distribution of urban land use types. As a rule, these regularities are characterized by the stability and duration. Therefore, a special interest cause the turning points in the city development, when during a relatively short period of time there is a significant restructuring of land use [1].

It is well known that cities are fundamental to the development of any country. Exactly in cities the main industrial, scientific and cultural potential of the state is formed. In this case they are the "pioneers" on the introduction of advanced technologies, provision of services and providing of citizens life quality standards.

The socioeconomic development of mining regions is closely associated with the history of its territory settlement and features of its economic development, which determined the industrially caused formation character of the settlement network, especially in the central part of Ukraine.

With this feature, the range of socio-economic problems at the present stage of development is largely associated.

Analysis of recent studies and publications relating to this problem. The studies in this article are related with implementation of the tasks of the State target program of land relations development in Ukraine [3]. In the present circumstances, many lands under industrial enterprises are not used

for its intended purpose, which contradicts the norms of the law [4, 5].

Unsolved part of the general problem. Many scientists, most of which are economists and historians, were covering the problems of urban areas formation development in the mining and industrial areas, on the basis of subject-object sphere and methodological apparatus of its scientific area. In the context of the socio-geographical research the issue of territorial organization of the economy and settlement on the territory of mining and industrial regions is not enough studied [2].

Task definition. The experience, mistakes and the consequences of urban areas formation process in the mining and industrial regions should be studied, analyzed and considered at the modern difficult development stage for old industrial regions. That's why, the formation of urban areas in the industrial regions of Ukraine is an urgent task today.

The presentation of the main research material. Intensive development of industry in mining regions was accompanied by a significant inflow of population and its territorial distribution within the region (concentrated near the enterprises, factories, mines and pits), which was considered primarily as an important factor of increasing the economic potential of the territory and more rational production work distribution. These processes caused the high population density and a significant degree of urbanization, the rate of which in mining and industrial areas was one of the highest in recent years. The population density in some mining regions exceeded the norm, for example in the Donetsk region in 1970 reached 200 persons per 1 square km, which is 2.5 times more than in all over Ukraine at that time, and the population density in the central part of the mining region reached 300 persons per 1 km² [6].

Active development of objects and enterprises of metallurgical and mining profile in the last century has caused high rate of planning development of the city in a north-south direction, so Kryvyi Rih length in the

direction of the south-north is - 126 km, while the width of the city in the latitudinal direction is only 20 km . Площа території міста в існуючих межах становить близько 43 тис. га.

The scheme of industrial areas and populated arrays arrangement in the example of the Kryvyi Rih city is shown in Fig. 1.

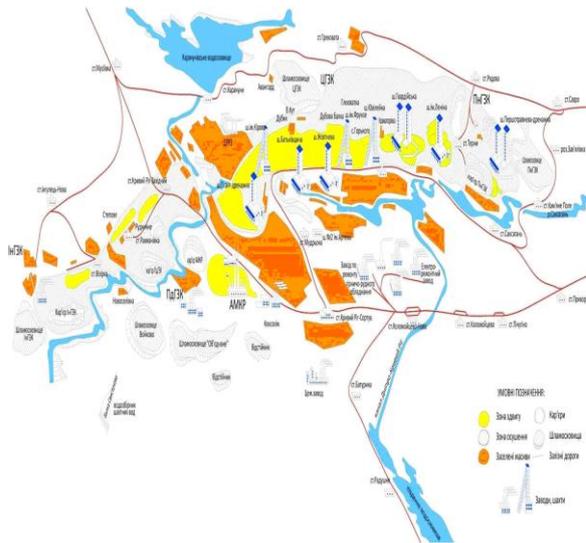


Fig. 1. Scheme of impact of Kryvyi Rih mining and metallurgical complex on the environment.

A very important and significant problem for the city is the problem of a clear functional zoning of all urban areas. As the most urgent this problem has to be constantly in the spotlight and at the same time it requires a longer time limits for its solution. In order to more efficient use of territorial resources, the realization of construction plans is carried out due reconstruction and compacting of existing buildings with the demolition of depreciated housing stock.

The scheme of the city is linked to local natural and town planning conditions, on the basis of which the major planning areas is formed. Their sequence gives to the scheme the linear character in generalized form.

The city service system is based on a polycentric pattern, the nodes of which form the unique attraction foci of cultural - domestic and commercial services for the population of the entire city along the main compositional axis. Further development suggests the unification of all the individual areas of green space in a single system. The solution of the Kryvyi Rih city general plan is aimed to determining the functional purpose of city areas, based on the

totality of social, economic, environmental and other factors.

This feature of the urban areas formation development in the mining regions is one of the most important prerequisites for economic development and the emergence of urban agglomerations, formation of which was occurred as a consequence of the territorial concentration of settlements around the large and major cities, and in places of natural resources localization, in particular in areas with a predominance of extractive industries.

For example the development of coal deposits was accompanied by the formation of an industrial area with an extensive network of production centers - cities and urban-type settlements. Already in the early 1970s in many of them there was a significant complication of the production profile and they have become powerful cities and multisectoral centers.

First of all, it is Kryvyi Rih, Donetsk, Gorlovka, Makeevka, Enakievo, Zaporozhye and other [10, 11, 12].

The peculiarity of urban areas formation in the mining and industrial cities was the development of the industry. The process of formation of this system covers a relatively short period - a little over 100 years.

The land fund structure of the industrial cities of Ukraine has its own special structure, because a considerable area are reserved for industry, as well as a significant part of the land is given to eliminate the effects of industrial activity. Industrial production on the territory of Ukraine is placed unevenly [13]. The location scheme of the main mining regions of Ukraine is shown in Fig. 2.



Рис. 2 The location scheme of the main mining regions of Ukraine [13]

Its highest spatial concentration has developed in industrialized areas with a predominance of heavy industry. Industry as one of the major spheres of social production of the country, which are presented in Fig. 3,

determines the level of socio-economic development and specialization of the economy and the extent of participation in the territorial division of labor.

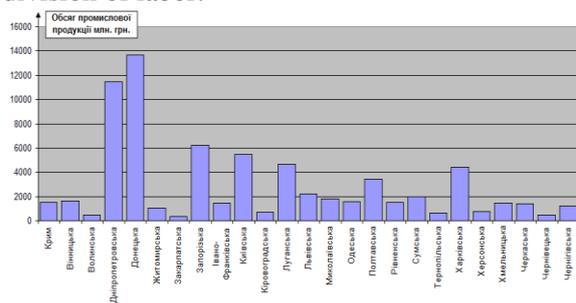


Fig. 3 The volume of industrial production [14]

Monofunctional industry specifics of more than a third of Ukrainian cities has created a difficult situation especially in the area of formation and functioning of the labor market and considerable tension in all other spheres of the city life. In general, the analysis of research [15] has allowed to note the following most urgent problems of industrial cities development: a low level of social development; lack of resources for development; insufficient level of funding from the state budget; unilateral specialization of enterprises and insufficient utilization of capacities; insufficient economic opportunities of city-forming enterprises, the lack of demand for their products; limited opportunities for training and employment; underdevelopment of the service sector; negative demographic situation, aging of the population; insufficiently developed system of water, power, heat supply and sewerage networks; the poor state of the road sector; underdevelopment of transport communication; unsatisfactory situation with the collection and disposal of solid municipal, and in certain areas - industrial and toxic wastes; low level of urban infrastructure development and sphere of social services.

These problems convert the small cities into the ecological disaster zone with high crime, etc. Meanwhile, in the last quarter of the twentieth century in European countries in a certain way the rapid technological progress, "the third industrial revolution" has affected to these trends. This has formulated new preconditions for further urbanization development. Compared with the previous stages of urbanization development, the city-forming factors and conditions are changed, the role of scientific and educational, scientific and technological factors

is significantly increased, and on the other hand - the architectural and landscape factors [12]. In modern conditions of the economy reforming, considering the crisis situation in many industries, almost all industrial regions are considered as depressed areas with significant social problems arising not only by structural and economic aspects but also by environmental issues that hinder to sustainable (balanced) development of large industrial cities region, the urban environment of which has also been formed under the influence of intensive development of the industry (mainly heavy), without considering many of the social and environmental aspects of the urban settlements. [15]

Conclusions The conducted research allows to assert that changes in land use on the example of the Kryvyi Rih city were in many ways determined by spatial structure, which have developed in the previous period, and the spatial transformation process should be viewed as the result of interaction between preconditions and current processes.

In the post-socialist period the urban planning activity is subjected to cyclical real estate market. The main agents of transformation of the land use functional and spatial structures are becoming the residential and commercial real estate, which provides to investors the most fast return of equity. The city territory balance is changing in favor of residential and public buildings.

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Features of formation of urban areas in the industrial regions of Ukraine

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The aspects of functional and spatial structure of land use in Ukraine. Attention is paid to the spatial distribution patterns of urban land uses. Analyzed feature of the formation of urban areas in mining regions, which is one of the most important economic assumptions. We describe the most acute problems of industrial cities of Ukraine. Proved that the industry as one of the major spheres of social production in the country determines the level of socio-economic development, specialization of the economy and the extent of participation in the territorial division of labor.