



STRATEGIC ECONOMIC ORIENTATIONS FOR SPATIAL REGION DEVELOPMENT

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Abstract. Conceptual foundations of strategic planning of spatial development of the region described in the scientific research. Key priorities for spatial development defined. The main provisions of the strategic guidelines for spatial development of regional economy described. Strategy of the main components of the structure- region - agriculture and industry developed. Financial support implementation of these strategies and economic and social rationale for their implementation defined. The optimal ratio of structure – element spatial size of the region is theoretically justified.

Introduction. The economic crisis has set Ukraine and its regions, the problem of choosing the strategy for further development of the national economy. In this regard, it is necessary to the formation of a model of the national economy, the determination of its structure, forecasting and planning of individual components, taking into account new objectives related to size into account regional economic space and building a socially oriented economy (Bell, 1996).

Studies of regional economy, in particular the study of the parameters of the dynamics, allows to identify the positive and negative changes in the qualitative and quantitative indicators of economic activity regions. This requires a deep and qualitative evaluation component analysis and spatial development prospects of the country and regions.

The main way out of the crisis situation – is the formation of a strategic plan for spatial development of the regional economy.

The economy of the region as a system object of study is determined by the structure, a set of elements and relationships between them, in which there are signs of system integrity. In general terms, the structure of the economy – a ratio that reflects the relationship and interdependence between different parts, sectors, elements, branches, and to date economic activities (Heyts, 2009).

The economy of the region, which occurred today in is inefficient because leads to excessive material and energy resources. The structural crisis – a specific economic phenomenon, which is manifested in the imbalance of certain parts of the economy, including its branches (economic activities).

The purpose of the strategic guidelines Spatial Development is the identification of priority sectors (economic activities) and their enterprises that can produce competitive on the domestic and foreign markets products and ensure economic growth. Branches that are not able to produce competitive products that require restructuring, modernization, equipment and technology. Therefore, the formation of spatial development strategies need to consider innovative component.

Since 1994, Ukraine has changed conceptual approaches to the formation of a strategic plan for spatial development of the economy. In world practice in determining the strategic objectives of the region accounted for the following areas:

- reduction of the share of the primary sector (mining industry);
- slow decrease in the secondary sector (manufacturing industry);
- rapid expansion of the tertiary sector (information activities, communes services, etc.).

This approach ensures creating additional jobs and increase the gross regional product.

A conceptual approach to strategic planning of spatial development of regional economy includes the following priorities on which strategy is formulated:

- encouraging industries and businesses that produce new goods (works, services) with high consumer properties;
- liquidation of companies in unpromising areas through public sector and regional programs;
- accelerated inclusion of Ukraine in the existing system of international division of labor by encouraging industries that produce globally competitive products.

A study of existing international concepts the authors found that the main problem in the formation of the concept is the choice of priority sectors, as only after the resolution of this issue it is possible to determine trends and investment in the economy.

Method. The position include spatial development objectives for the future, which formed the basis of the analysis of the actual state of the economy through economic – mathematical modeling of the economic situation (Tregobchuk, 2002). Conducting this analysis to set the trends in economic growth, to determine the characteristics and assess the influence of the economy on the development of the region, to calculate the probability of maintaining growth in the future.

Based on identified trends in gross regional product as a whole and on individual's economic activities developed models (including robust), taking into account the influence of factors (structure-specific components) on gross regional product (GRP). With built isoquants were received combinations of certain economic activities that provide a certain amount of GRP.

Thus, the analysis of gross regional product, its trends, structure-components and their influence on the structure of GRP allowed to define the strategic guidelines for spatial development priorities of economic activities.

The basis of a strategy of spatial development of the regional economy lies in the following:

- a) define the structure of the gross regional product, depending on the model structure of GRP certain ratio of its individual components;
- b) develop measures to increase GRP 10 – 20%, whereas a further increase in practice is virtually impossible;
- c) strategy is developed on the basis of an increase of one / two factors when fixing on the average of others;
- d) the calculated value of the GRP – in 1,2 ... n performed compared to the baseline provided in $n > Y$, this strategy can be adopted for implementation;
- e) the calculated effective strategies considered a new type of economic structure of the economy of the region.

Results. Model depending on the particular structure of GRP ratio of its individual components contain six major sectors of the economy: agriculture, industry, construction, trade, education and health (tab. 1).

Table 1 – Ranking the major components of Poltava region economy

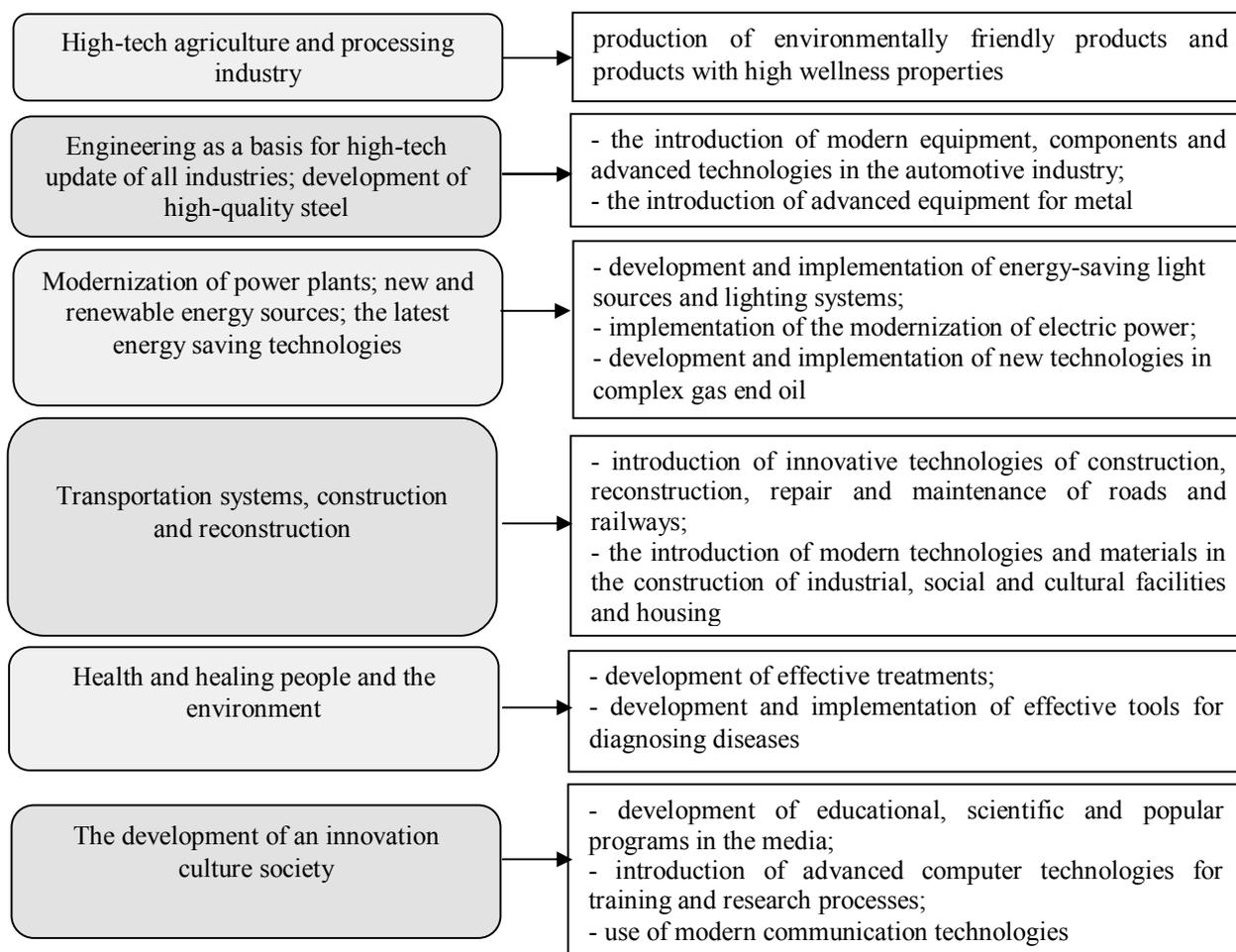
Sectors of economic activities	Share GRP, %
1. Industry	46,77
2. Agriculture	10,73
3. Trading	10,13
4. Education	4,07
5. Health	2,77
6. Construction	2,80
7. Other economic activities	22,73
Total	100,00

The value of the gross regional product with such a structure is not sufficient because the study period were obtained in the region and greater volumes of GRP. It is therefore necessary to develop measures to improve the regional economy and spatial development strategies.

These strategies have been calculated on the basis of their commercially reasonable spine, thus take into account the experience of developed countries, especially the regional economic situation, inflation. Existing strategies in GRP growth was due to an increase in the share of industrial in the total gross regional product. On the other hand, you must also consider the strategy to increase the volume of gross regional product by changing the cost structure-values for each component, but without regard to their share in the total GRP. A mandatory component of any pair of existing industries are industries. It is advisable to choose a combination of cost of economic activities that use these strategies - namely, industry and agriculture.

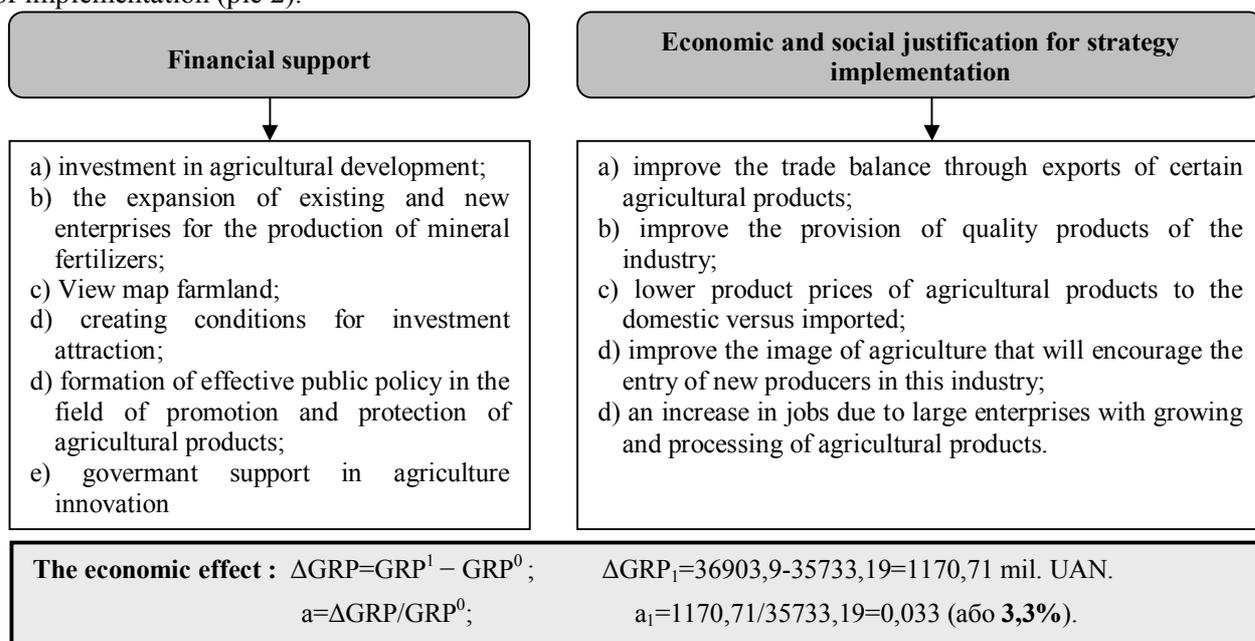
Given the results of the study, it is useful to define the following strategic priorities for spatial development Poltava region (pic. 1).

Thus, based on the main priorities for spatial development of Poltava region and a number of studies, we have developed several strategies for spatial economic development Poltava region.



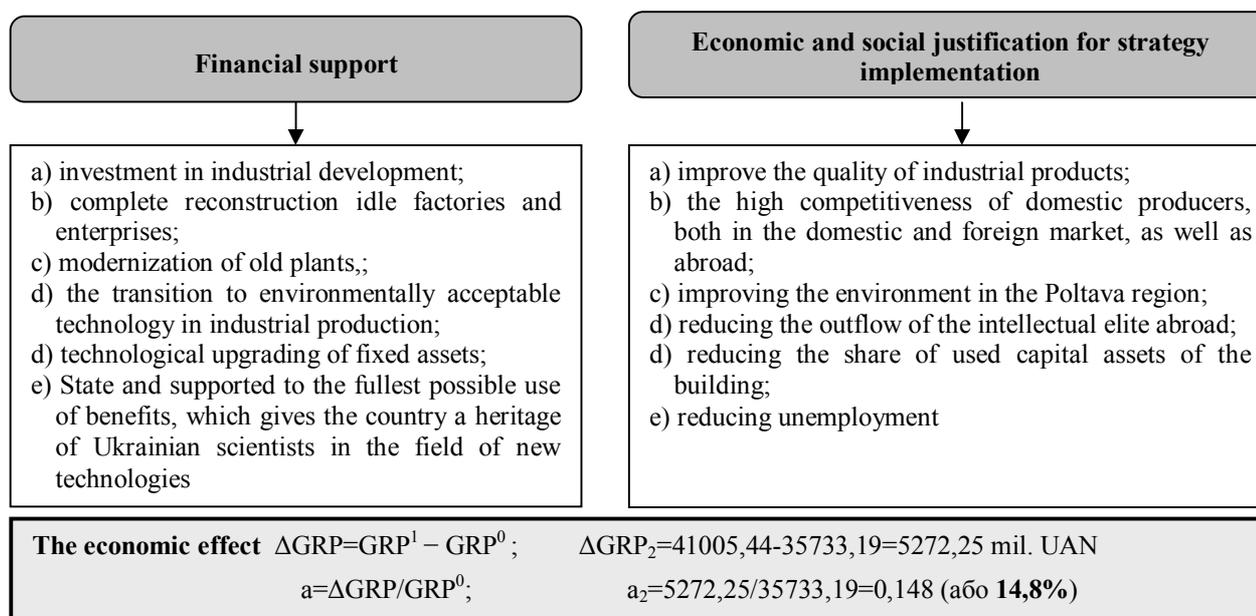
Picture 1. The main strategic goals of development Poltava region

Strategy number one agricultural development into account its material welfare and economic feasibility of implementation (pic 2).



Picture 2. Strategy 1. The development of the agricultural sector

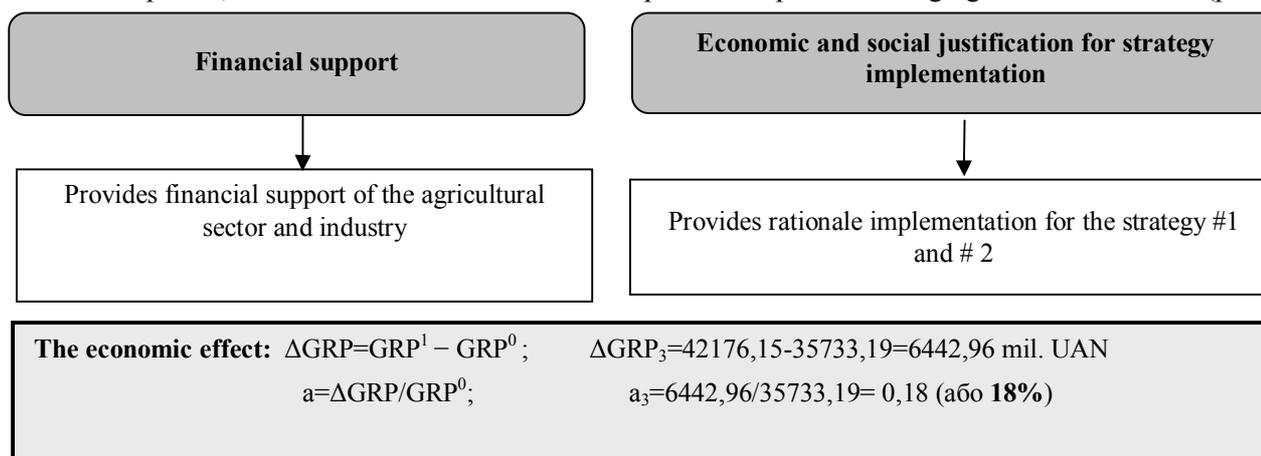
Another strategy is about industry development (raise 20%), which is shown in pic. 3.



Picture 3. Strategy 2. Industrial development

The third strategy is enhanced character (robust model) which integrates both an increase in these two economic activities such as agriculture and industry. It combines two previous strategies (№ 1 and № 2).

In our opinion, it is the ratio of structure-GRP is optimal and provides a high growth rate of GRP (pic. 4)



Picture 4. Strategy 3. Enhanced strategy that combines Strategy 1 and 2

In The study was set up measures for the development of certain economic activities based on the construction of production functions depending on the gross regional product of its structure-specific ratios of the components. Based on the constructed isoquants, provided guidance on forming optimal economic structure of the region that base BY justification for the most favorable relationship between resources, ensuring optimal use and achieve acceptable patterns of gross regional product.

Discussion. In a further study is necessary to use additional features including Lagrange, which will help to balance between individual economic activities with minimal costs.

Finding the optimal structure-elements balance between the region's economy by using the Lagrangian function, which is represented in the general form:

$$\Phi=K^\beta L^\alpha - \lambda(r_\alpha L + r_K K - M), \quad (1)$$

λ – Lagrange multiplier;

r_α – rate of labor costs;

r_K – pricing of capital;

$M= r_\alpha L + r_K K = M$.

Mathematical output possible to determine the optimum point in the general form:

$$f_{\min}(x_1; x_2) = \frac{1}{M} \left(\frac{M}{1-M} \right)^{1-M} \times r_{x_1}^M r_{x_2}^{1-M} \times Q \quad (2)$$

Thus, using the production function Cobb-Douglas function and Lagrange will determine the strategic goals of spatial development of the regional economy.

Results of research: an expression of the essence and the adequacy of the obtained models, their economic substance and building robust models are the basis for the formation of a strategic plan for spatial development of regional economy.

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