РОЗВИТОК ПРОДУКТИВНИХ СИЛ І РЕПОНАЛЬНА ЕКОНОМІКА

UDC 332.122:35

Harkava V.F.

PhD,

Pylyp Orlyk International classical University

## THE IMPROVED UTILIZATION OF THE POTENTIAL OF THE REGION

# ПІДВИЩЕННЯ ЕФЕКТИВНОСТІ ВИКОРИСТАННЯ ПОТЕНЦІАЛУ РЕГІОНУ

#### **ANNOTATION**

The article defines the concept of a region and the main directions of state regional policy. Defined a mathematical model based on scenario modeling that will enhance the use potential of the region. The main stages of construction of model of increase of efficiency of use of potential of the region, based on the scenario approach. Defined the main feature of the scenario approach to the construction of the model as the analysis of the events, the consequences of which depend on a number of factors that affect their development a decisive influence, which depends on both objective and subjective circumstances. On the basis of the model the main priority of the state regional economic policy in the framework of the state program is to optimize the structure of the economy of regions, which is to use the effective forms of management based on the rational use of resources.

**Keywords:** region, capacity, efficiency, model, state, state regional policy.

#### **РЕГРИЧЕР**

У статті визначено поняття регіону та основні напрями державної регіональної політики. Визначена економіко-математична модель на основі сценарного моделювання, що сприятиме підвищенню використання потенціалу регіону. Визначено основні етапи побудови моделі підвищення ефективності використання потенціалу регіону на основі сценарного підходу. Визначена головна особливість сценарного підходу до побудови моделі як аналіз подій, наслідки яких залежать від ряду факторів, які впливають на їх розвиток вирішальний вплив, яке залежить як від об'єктивних і суб'єктивних обставин. На основі побудованої моделі основним пріоритетом державної регіональної економічної політики в рамках державної програми є оптимізація структури господарства регіонів, яка полягає у використанні ефективних форм господарювання на основі раціонального використання ресурсів.

**Ключові слова:** регіон, потенціал, ефективністю, модель, держава, державна регіональна політика.

### *RNJATOHHA*

В статье определено понятие региона и основные направления государственной региональной политики. Определена экономико-математическая модель на основе сценарного моделирования, которая будет способствовать повышению использования потенциала региона. Определены основные этапы построения модели повышения эффективности использования потенциала региона на основе сценарного подхода. Определена главная особенность сценарного подхода к построению модели как анализ событий, последствия которых зависят от ряда факторов, как от объективных и субъективных обстоятельств. На основе построенной модели основным приоритетом государственной региональной экономической политики в рамках государственной программы является оптимизация структуры регионов, которая заключается в использовании эффективных форм хозяйствования на основе рационального использования ресурсов.

**Ключевые слова:** регион, потенциал, эффективность, модель, государство, государственная региональная политика.

Statement of the problem. In connection with the inefficient use of the potential of the region is the need to develop the state regional policy, which is based on a mathematical model. Therefore, the regional government policy in need of reform, aiming at efficient interaction of all market participants.

Analysis of recent researches and publications. Regional management is dedicated to the works of many foreign and domestic scientists, in particular, Cold [15], D. Novikov [9], Petrachkova A. [10] etc. But despite significant scientific and practical results obtained in the above-mentioned scientists, the problem of increasing the efficiency of regional policy does not have sufficient scientific basis, thus the necessity of increase of efficiency of use of potential of the region.

The results of the study. A region is a contiguous part of the country, which is characterized by a distinct natural environment that determines the type and structure of the economy, which is characterized by a kind of ratio of various sectors of the economy, deep and diverse links between them, a complete cycle of reproduction, common features of historical development, production skills, socio-cultural traditions of the population, the functional characteristics (specialization) allocated for the combination of these characteristics in the administrative unit and is a subsystem of the socio-economic complex of the country [4]. Therefore, the region is the economic system in this territory, with its production, distribution, exchange and consumption of material goods and services.

Contemporary research control system, associated with the increasing complexity of the socio-economic system, define the appropriate application of modern approaches and management methods, such as in particular scenario, cognitive, synergistic, reflexive, rating.

The scenario modelling approach is reflected in the work Berezikova A., there is developed a simulation model to assess the influence of major factors on the resource potentials of the enterprise, optimisation model to determine the maximum possible level of use of labor potential of the enterprise, system-dynamic model of decision-making for managing the development of the resource potential of the enterprise; proposed a conceptual approach to development of information management system development of the resource potential of the enterprise; Pologne developed a model information system for decision support for managing the development of the resource potential of the enterprise [1].

According to Kaimakova M. scenario-based approach to modeling—it's just more or less formalized process of developing a vision for change that can be anticipated concerning the types and scale of activity labour capacity, as well as its structure, and any changes in the external environment that may impact on the latter. Creating a scenario involves the assessment of the General nature of the likely internal changes and the likely impact on staffing requirements [6].

According to Yuri Rymarenko feature of the scenario method is the analysis of events whose consequences depend on several factors, which have on their development a decisive influence, which depends both on objective and subjective circumstances. That is, the object is understood as a complex system with a human factor that unites a particular society. Methodology the scenario approach is based, therefore, on the one hand, based on the usual scheme of any activity—"goal-tool-result", and with another—function [11].

According to Gracheva M., Fadeeva L., Cheremnykh N. the scenario approach to modeling is the development of methods of analysis of the project sensitivity in the sense that the simultaneous consistent (realistic) modifies the whole group, check on the risk variables of the project. Thus, it can be analyzed the impact of simultaneous changes in all major variables of the project that determine the choice of the consumer. An important advantage of the method is the fact that the variances of the parameters are calculated, taking into account their interdependencies (correlations). This files most often calculated in the

pessimistic variant (scenario) of possible changes of variables, the optimistic and the most likely options. According to these calculations determined the new values of the criteria. For each scenario investigated how to act in the relevant organizational and economic framework of the project implementation, what will be the income, losses and performance indicators from individual participants. The project is considered stable and effective if in all considered situations, the interests of participants are respected, and possible adverse consequences are eliminated at the expense of established reserves and of reserves or reimbursed by insurance payments [5]. The scenario approach to modeling is based on the creation scenario. A scenario is a description of a picture of the future, consisting of agreed, logically interrelated events and sequences of steps with a certain probability leading to a forecasted final state.

It is possible to develop two types of scenarios. The first type of scenarios contains a description of the sequence of steps leading to a predictable state of labor potential of the region (table. 1). The second type of scenarios provides a description of possible consequences. The principles of a scenario approach to modeling:

- 1. Accurate assessment of the situation. Assessment leads to understanding the dynamics of influence of factors on the labour potential of the region.
- 2. Special forecasts trends of development of labor potential of the region.
- 3. A necessary condition for the absence of pretir alternative scenarios.

Table 1
The sequence of stages in the development of scenarios increase efficiency of use of potential of the region according to the scenario approach to modeling

Етапи	Зміст
1. The establishment of the research subject, the potential of the region and its structuring	Definition of indicators (indicators), which can be characterization of potential of the region. Analysis of the actual state of the potential of the region.
2. Determination of significant factors that affect the potential of the region, structuring	The selection of factors and alternatives. The determination of the direction and strength of impact of factors (positive and negative impact). Determination of the structure factors, which are important in relation to the study.
3. The definition of development trends	Forecast of the actual state of the potential of the region. Identification of factors with the implicit and explicit tendency of development. Definition and justification of alternatives for the region.
4. Development and selection of alternative scenarios for the future	The development of alternative scenarios and their test complexity, logic, and consistency. The selection of two or three options according to the chosen criterion. Check the selected options on requisite variety, stability, a high degree of probability.
5. The interpretation of the selected scenarios. The identification of possible counter events	Forecast of development of the selected scenarios. Development of a detailed expanded edition of selected scenarios. The measurement of performance counter events that can affect the course of development. The development of a "future scenario" taking into account the influence of opposing events.
6. Development of the final version of the script and reducing the risk of possible losses	The wording "future scenario" taking into account the interests of all advanced winactivate and events. Assessment of the impact of deviations from the main path of the script.
7. The migration scenario in a practical manner	The wording of the strategy development potential of the region.  The development of plans for the development potential of the region (strategic plan, development plans, current plans, programs and projects).

Therefore, based on the constructed scenario models at the present stage of development of Ukraine to the priorities of state regional economic policy under the government program include:

- optimization of structure of economy of regions, which is to use the effective forms of management on the basis of rational use of potential resources: material, technical, labor, information and time;
- pooling of financial resources of regional budgets and budgets of local self-government to strengthen the financial bases of development of economy of region;
- development of interregional and international cooperation;
- expansion of powers and strengthening of responsibility for regional development local authorities;
- ensuring the development of a systematic strategy of regional development taking into account regional specifics.

State regional policy is based on the implementation of the reallocation of resources to support depressed territories and solve problems in scale are nation-wide. The government guarantees the standard of quality of life, defined for every citizen regardless of his place of residence. The necessary state support should be granted on the basis of clear criteria for defining areas which needed support. Local authorities should have adequate tools to impact the socio-economic regional development. With this purpose it is necessary to provide:

- coordination of strategic objectives and development priorities of national and regional interests, ensuring the stability and predictability of relationship between the Central and local Executive authorities concerning development of territories;
- public investment in improving the regional infrastructure;
- implementation of large-scale private investment projects that need the support of the Executive, and the direction of loans from international financial institutions on socio-economic development of territories;
- labor mobility by reforming the vocational education and training system of employees, introduction of new technologies for regional management, including municipal, improving the system of training, retraining and advanced training of specialists from the regional Department;
- decentralization and separation of powers between the Central and local Executive authorities and local authorities regarding the provision of services, empowerment and greater accountability of these bodies for the decision socially-economic problems of development of regions, implementation of a transparent monitoring

mechanism, including the public, at each level of management;

- creation of legal, economic and organizational conditions for the effective implementation of the tasks and functions of local government.

In General, the strategic objectives of development of the regions according to the government program are to:

the inclusion of the regional economy in the global socio-economic processes of integration in the European community;

- the introduction of new technologies in the use of labor potential;
- approximation of the legislative framework in respect of the regions to European standards.

Based on the above regional policy should be aimed at achieving the following objectives:

- increasing the investment attractiveness and innovative activity of regions;
- the accelerated development of industrial and social infrastructure;
  - reduction of regional disparities;
  - strengthening of interregional relations;
- to ensure the reproduction and rational use of labour potential.

Conclusions, directions for further research. Therefore, the region is the economic system in this territory, with its production, distribution, exchange and consumption of material goods and services. Contemporary research control system, associated with the increasing complexity of the socio-economic system, define the appropriate application of modern approaches and management methods, such as in particular scenario, cognitive, synergistic, reflexive, rating. A feature of the scenario method is the analysis of events whose consequences depend on several factors, which have on their development a decisive influence, which depends both on objective and subjective circumstances. That is, the object is understood as a complex system with a human factor that unites a particular society. Therefore, based on the constructed scenario models at the present stage of development of Ukraine to the priorities of state regional economic policy under the government program include:optimization of the structure of farming regions, which is to use the effective forms of management on the basis of rational use of potential resources: material, technical, labor, information and time; combining the financial resources of the regional budgets and the budgets of local governments to strengthen the financial bases of development of economy of region; the development of interregional and international cooperation; the expansion of powers and strengthening of responsibility for regional development local authorities; support for the development of a systematic strategy of regional development taking into account regional specifics.

#### **REFERENCES:**

- Берсуцкий А.Я. Управление ресурсным потенциалом предприятия: модели и методы: монография / А.Я. Берсуцкий. Донецк: Юго-Восток, 2010. 185 с.
- Grayson George. K. American management on the threshold of the XXI century. To. Grayson. O'dell. – Economics, 1991. – 319 c.
- Greenberg J. Organizational behavior: from theory to practice. Greenberg, R Baron; lane. from English. O. V. Bredikhin, V. D. Sokolov. – Apex, 2004. – 912 p.
- Galbraith John. K. Economic theory and goals of society / per. from English. – M: Progress, 1996. – 408 p.
- 5. Грачова М.В. Моделирование экономических процессов / Под ред. М.В. Грачевой, Л.Н. Фадеевой, Ю.Н. Черемных. М.: ЮНИТИ-ДАНА, 2005. 351 с.
- 6. Каймакова М.В. Анализ использования человеческих ресурсов / М.В. Каймакова. Ульяновск: УлГТУ, 2008. 80 с.
- Лепа Р.Н. Ситуационный механизм подготовки и принятия управленческих решений на предприятии: методология, модели и методы: Монография / НАН Украины, Институт экономики и промышленности. – Донецк: ООО "Юго-Восток, Лтд", 2006 – 308 с. 6. Lefebvre V. A. Conflicting structures / /by V. A. Lefebvre, the Reflection. M.: Kogito-CENTR, 2003. S. 7-134.
- 8. Лефевр В.А. Конфликтующие структуры // В.А. Лефевр Рефлексия. М.: Когито-Центр, 2003. С. 7-134.
- Новиков Д.А. Рефлексивные игры // Д.А. Новиков, А.Г. Чхартишвили. – М.: СИНТЕГ, 2003. – 160 с. – Серия «Управление организационными системами».
- 10. Петрачкова А.Л. Моделирования процессов рефлексивного управления механизмами формирования спроса

- на продукцию предприятий: автореф. дис. на соискание наук. степени канд. экон. наук: специальность 08.00.11 «Математические методы, модели и информационные системы в экономике» / О.Л. Петрачкова; Донецкий национальный ун-т. Донецк, 2007. 20 с.
- Римаренко Ю.І. Етнос. Нація. Держава: Україна в контексті етнодержавного досвіду: монографія / Ю.І. Римаренко, М.М. Вівчарик, О.В. Картунов, І.О. Кресіна, С.Ю. Римаренко, С.О. Телешун, Л.Є. Шкляр. За заг. ред. Ю. Римаренка. К.: Ін-т держави і права ім. В.М. Корецького НАН України. 2000. 516 с.
- Рефлексивные процессы в экономике: концепции, модели, прикладные аспекты: коллективная монография / под ред. Г.Н. Лепы; НАН Украины, Институт экономики промсти. – Донецк: АПЕКС, 2010. – 306 с.
- 13. Сергеева Л.Н., Бакурова А.В., Воронцов В.Ст., Зульфугарова С.О. Моделирование структуры жизнеспособных социально-экономических систем: монография Запорожье: КПУ, 2009. 256 с. (Сер. : Жизнеспособные системы в экономике).
- 14. Сергеева Л.Н. Роль рефлексивного управления в обеспечении жизнеспособности социально-экономических систем : коллективная монография / Л.Н. Сергеева, А.В. Бакурова, Т.Ю. Огаренко // Рефлексивные процессы в экономике: концепции, модели, прикладные аспекты / [под ред. Г.Н. Лепы] ; НАН Украины, Ин-т экономики промышленности. Донецк : АПЕКС, 2010. 306 с. С. 16-31.
- 15. Управление ресурсами предприятия / Под ред. к.е.н. Ю.М. Воробьева и д.е.н. Б.И. Холода. Киев: «ЦНЛ», 2004. 288 с.