## Marina G. Lescheva<sup>1</sup>, Anna G. Ivolga<sup>2</sup>, Olexandr M. Labenko<sup>3</sup> SPECIAL METHODOLOGICAL ASPECTS OF ECONOMIC ANALYSIS FOR RURAL TERRITORIES DEVELOPMENT

The article presents the specific methodological framework for the assessment of economic, social, demographic and environmental processes of rural development. The systems of indicators used in the world practice of economic analysis of rural areas development and methodological approaches to their formation are considered. Suggestions on how to improve the information and analytical support arrangement for rural development are provided.

Keywords: sustainable development; rural territories; economic analysis; information support.

## Марина Г. Лещова, Анна Г. Іволга, Олександр М. Лабенко МЕТОДОЛОГІЧНІ ОСОБЛИВОСТІ ЕКОНОМІЧНОГО АНАЛІЗУ РОЗВИТКУ СІЛЬСЬКИХ ТЕРИТОРІЙ

У статті представлено методичні особливості оцінювання економічних, соціальних, демографічних, екологічних процесів розвитку сільських територій. Розглянуто системи показників економічного аналізу розвитку сільських територій та методологічних підходів до їх формування, які широко застосовуються в світі. Надано пропозиції щодо поліпшення організації інформаційно-аналітичної підтримки розвитку сільських територій. Ключові слова: сталий розвиток; сільські території; економічний аналіз; інформаційна підтримка. Літ. 15.

## Марина Г. Лещева, Анна Г. Иволга, Александр Н. Лабенко МЕТОДИЧЕСКИЕ ОСОБЕННОСТИ ЭКОНОМИЧЕСКОГО АНАЛИЗА РАЗВИТИЯ СЕЛЬСКИХ ТЕРРИТОРИЙ

В статье представлены методологические особенности оценки экономических, социальных, демографических, экологических процессов развития сельских территорий. Рассмотрены системы показателей экономического анализа развития сельских территорий и методологических подходов к их формированию, которые широко используются во всем мире. Предложены возможные решения по улучшению организации информационно-аналитической поддержки развития сельских территорий.

**Ключевые слова:** устойчивое развитие; сельские территории; экономический анализ; информационная поддержка.

**Problem setting.** The problem under study here is the lack of methodology formulation for economic analysis of rural areas development. The expansion of theoretical and methodological basis for studying rural regional development is required along with the system of key indicators to reflect adequately the factors and results of rural territorial development for a comparable integral evaluation. Sustainable rural development trends and policy mechanisms in recent years have become one of the important directions of economic research around the world. The implementation of such research results will improve the socioeconomic level of development and retain the population balance between rural and urban areas. All developed and developing countries implement their own programs aimed at socioeconomic development of

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rural areas. In addition, the EU adopted a common policy for the development of rural areas with the aim of balancing opportunities for all the EU members. Each country usually set similar objectives, taking such programs, but using different implementation strategies. There are many different unified indicators of rural territories development, but there is no single, accepted by the world community. The analysis results of the socioeconomic development of rural areas are the basis for decisions on further development of rural territories. This fact stipulated the need for searching a universal method of rural development analysis, which would display the most comprehensive picture of rural areas development.

**Recent research and publications analysis.** Theory, methodology and practice of the research on sustainable social development of rural territories explored by L.V. Bondarenko (2009; 2011), O.P. Grigorieva (2012), E.N. Kriulina (2013), A.V. Merzlov (2006), A.V. Merzlov and N.V. Leonova (2009), I.G. Ushacheva and L.V. Bondarenko (2012) etc. In foreign research the problems of economic analysis of countries' and regions' development are reflected in the works by Y. Bilan and B. Chmielewska (2013), J.L. Pender, J.G. Weber and J.P. Brown (2014), M. Petrick and G. Buchenrieder (2007) etc.

Nevertheless, the methodological support for rural development analysis is at an early stage of its formation.

**The research objective** is to identify the methodological features of economic analysis of rural territories and the justification of the system indicators that adequately reflects the level and the trend of development.

**Key research findings.** The starting point of this research is to clarify the research object, since in the world practice there is no unified approach to the definition of "rural area".

In the "Concept of long-term social and economic development of the Russian Federation for the period till 2020", "sustainable development of rural areas, improving the living standards of the rural population" is related to the main objectives of the agrarian policy. The State Program "Development of agriculture and regulation of agricultural products markets, raw materials and food for 2008–2012" is the first section of "Sustainable development of rural areas." These documents define the key problems of Russian villages, set out the aims, principles and objectives of rural policies, directions, mechanisms and stages of its implementation.

The main part of legislation regulating the sustainable development of rural areas in Kazakhstan was the state program for development of rural areas for the period until 2010. But there is no clear definition of rural areas in it. Its aim is to create normal living conditions for villages based on the optimization of rural population. The main focus of this program is state support vital infrastructure development, especially in rural areas with high potential for socioeconomic development, ensuring the necessary income level for rural residents. As a result, if such capacity is not present then the support is not provided.

One of the mandatory conditions for problem solving is the availability of comprehensive information on the development of rural territories, including the characteristics of living conditions of rural population. The problem of informed choice of most significant and comparable indicators to obtain such information has not been solved. The current Russian Federal law has no fixed concept of "rural", neither clear and quantitative boundaries between urban and rural areas.

Rural researchers in the United States continually grapple with a long-standing methodological competition between two very different definitions of "rural." The Census Bureau's urban-rural classification – the only federal classification system that uses the term "rural" in its official, statistical – distinguishes more densely-settled and less densely-settled territories, using very small census blocks and block groups as units for analysis. Rural areas comprise open countryside and settlements with fewer than 2,500 residents (The Census Bureau, USA).

According to another source (Standards for Defining Metropolitan and Micropolitan Statistical Areas, 2000), rural territories can be defined as: fringe (census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster), distant (Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster), remote (Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster).

Prior to Census 2000, "urban" referred to all territory, population, and housing units located in places with the population of 2,500 or more. With Census 2000, the definition changed, and now the Census Bureau's geographers look at every block in the nation and decide if it is urban or not. There are very specific criteria on whether a block could be labeled "urban". Land use patterns in America can be complicated and the rules for deciding "urbanness" take into account many kinds of situations. They generally have to do with density of settlement and proximity to other urban blocks.

For Census 2000, urban territory, population, and housing units belong within urbanized areas (UA) or urban clusters (UC). UA and UC boundaries consist of:

- core census block groups or blocks that have the population density of at least 1,000 people per square mile;

- surrounding census blocks that have the overall density of at least 500 people per square mile.

Putting another way, the urban/rural classification cuts across geographic entities. For example, there are both urban and rural territories within both metropolitan and nonmetropolitan areas. For this reason, metro and non-metro areas cannot be used as a proxy for urban and rural. In summary, rural is any territory that is not urban. The Census Bureau's use of the word "rural" is what is left over after urban has been defined.

Information provided on the official website of the Ministry of Agriculture of Russian Federation refers to a rural area outside the boundaries of urban settlements, including the territory of rural settlements and intersettlement territories. Article 2 of the Federal Act of 6 October 2003, # 131-FZ "On General Principles of Local Self-Government in Russian Federation" determines rural settlement is a "one or more common territory of rural settlements (towns, villages, hamlets and other rural points), in which local government is exercised, either directly, or through elected and other bodies of local self-government" and intersettlement territories – "territory which is outside the boundaries of settlements".

In the OECD countries rural areas are considered as communities with the density of population below 150 people per 1 km<sup>2</sup>. There are the following types of territories recognized at the regional level:

- rural territories with over 50% of population living in rural communities;
- predominantly rural territories (from 15 to 50%);
- predominantly urban territories (below 15%).

There are no such target indicators established in developing countries, while the implementation of the OECD criteria entails us to consider almost two thirds of the territory of Russian Federation (approximately 5691.8 ths km<sup>2</sup>) as rural. Those areas are inhabited by 39.2 mln people (27% of the total Russia's population).

In order to develop and estimate the achievements of agricultural, social and economic policies, it is necessary to use the data on living standards of population, labor market situation and non-agricultural employment, rural living standards, various demographic characteristics, data on sources and levels of income, territorial differentiation, multifunctionality of agriculture, and many more (Kriulina, 2013). At that the list of the utilized indicators should not be too long (for example, the EU countries use 55 indicators to analyze their rural development). Those indicators have to be informative, full, reliable, and allow developing statistical series in order to discover tendencies.

Experience of developed countries in the implementation of rural development indicators is a subject of interest for developing countries, where analytic support for rural development is still at its early stage. In the meantime, agriculture is not the major sphere of economics for most rural areas in the OECD countries. Thus, farmers are the minority in rural settlements, while rural citizens are actively involved into alternative types of employment. In this respect, the wide range of analytic indicators, accepted by the OECD for analysis of quality of life and living standards, covers the whole variety of rural life. There are the following aspects of rural development considered:

- population and migration;
- structure of rural economics and indicators of its development;
- social welfare and fairness;
- environment and sustainable development (Grigorieva, 2012).

In order to cover the emphasized spheres in the most effective manner, the basic set of social and economic parameters is adopted for rural areas.

Population and migration are characterized by the following indicators:

- density of population – the main criterion to differentiate rural and urban population, which reflects territorial differences in access of population from certain areas to infrastructural assets and basic social services;

- share of population living in rural communities;

- overall population change, natural population growth, net migration, which reflect demographic changes;

- number of family members, including number of children, which describe changes of social organization on the microlevel;

- relative indicator of number of dependants (people below 14 and above 65 in relation to the number of people between 15 and 64);

- relative indicator of number of people with a proactive attitude (the number of people between 29 and 39 in relation to the number of people above 60). Those

indicators are important tools of social and economic analysis when planning infrastructural assets, in particular nurseries, schools, and hospitals in rural areas.

The key task of rural development is provision and support of effective production and employment of rural population. That is why the data on structure of rural economy and the level of its development are the basic ones for assessment of conditions and perspectives of rural territories. The following indicators are implemented for analysis:

- cost of agricultural production, monetary units;

- average annual growth rate and absolute increment of agricultural production during the last 5-10 years;

- share of agricultural production in the structure of GRP, %;

- working population, including men and women, their dynamics, people;

- number of unemployed people, with a breakdown by sex, age, duration, people;

- share of various branches of rural economic in overall employment and production of added value, %;

- men employment in agriculture, % from the total number of men, employed in the economy;

- women employment in agriculture, % from the total number of women, employed in the economy;

- workforce productivity in deferent branches of rural economy (to discover the necessary structural shifts and corrections to be made in relation to certain territories);

- export-import ratio of major food and agricultural commodities (balance of visible trade).

It is common for the OECD countries to include data on investments (with their distribution on private and state ones) into the range of basic indicators. For the majority of developing countries such data collection in relation to small administrative entities is difficult.

The next factor determining the tasks of rural development policies is the data on social welfare and living standards of population. They are reflected in the following indicators:

- income level of population, wages and accessory salaries in agriculture;

- GRP per capita (when using this indicator, it is necessary to consider that GRP is produced by not only settlers of certain areas);

- share of rural population with the income below the poverty line, % of the total rural population;

- housing per capita – important component of complex assessment and monitoring of living conditions of rural population. In order to get more detailed information on regional living conditions and quality of housing, that indicator may be complemented with the data on share of private suitable dwellings and square meters of living space per capita;

- share of population above 25 with completed specialized secondary education (when using this indicator, it is necessary to consider the substantiate differences of education systems in various countries);

- child mortality, % per 1000 children aged up to 5 years;

- crime rate (for more precise evaluation of conditions of medical care delivery and provision of self-security it is necessary to implement a wider range of social indicators).

Environmental conditions are considered not only as an important potential of rural development, but also as a result of such development.

Terrain and climate determine the attractiveness of a region as a place to live, work and rest. That is why several indicators are implemented for monitoring the environmental situation, including: total land use area, presence of natural resources under protection, number and acreage of wildlife areas, air quality (air pollution, primarily carbon and sulfur dioxide). Aggregator, which included the variety of data on temperature, rainfalls, and number of sunny days, is the growing season length. This indicator is important not only for agriculture, but also for the assessment of attractiveness of local conditions for living and tourism. The analysis involves data on land areas, where biodiversity is preserved; areas, officially recognized as environmental; and share of agricultural lands under organic farming.

Tourism in developed countries is considered as one of the key branches of economy, influencing many aspects of social and economic policies: employment, territorial development, education, environment, culture, transport, finances, and taxation. The limited number of indicators is implemented for the assessment of tourism development level in rural areas: cost of consumption and offer of tourist services, number of rural people employed in that sphere, incomes of local budget from tourism. Rural tourism is still at early development stages in developing countries.

The concept of economic substantiality is the basis for assessment of rural development in Russia. In accordance with that the economic basis is the necessary condition of life-sustaining activity of rural settlement. When analyzing the economic potential of rural areas, the following indicators are usually studied: natural conditions; assets; general characteristics of labor resources, which is not sufficient for full and consistent information (Grigorieva, 2012). Some indicators, used to be considered as secondary for economic results of agricultural activity, are becoming relevant nowadays, in particular:

- living conditions in rural areas;
- demographic situation;
- rural social, cultural and leisure infrastructure;

- access of rural people to communications, transport, education, medicine, consumer services and other benefits, usual for urban citizens.

Development of a system of analytic indicators, which describe the level of development of rural territories, has to be completed in compliance with international standards. However, their list may be very much varied to reflect the role and specifics of agricultural sector and the system of rural settling in Russia. It is necessary to consider the significant interregional differentiation and wide range of economic subjects in rural territories of the country. Various demographic indicators and some other social and economic characteristics, corresponded to the common practice of economic analysis of rural development and established on vast data arrays, may be implemented in a proper manner.

Qualitative economic analysis of current state and tendencies of social and economic development of rural areas, level and quality of life of rural people requires the integration of comprehensive and multifold information. That is confirmed by foreign practice as well. For the information support of that problem, besides the data from the current federal statistical surveys, data of special analytic researches are required, as well as the information from the Ministry of Agriculture, Ministry of Economic Development, Ministry of Education and Science, and some other bodies, which implement their own programs, related to rural development or rural areas to any extent.

Currently those data are not getting centralized, and are distributed between separate ministries. Thus, indicators, describing medical care and state of health of rural people, are recorded by the Ministry of Health Care and Social Development of Russian Federation; monitoring of education is held by the Ministry of Education and Science of Russian Federation etc. Eventually, the problem does not get any complex approach.

Social programs on the development of rural territories, healthcare, culture, sports etc. only partially improve the overall situation, as a factor of "holding" rural people. Partial measures and point investments are not enough for recovering rural areas, however they bring improvements of economic indicators in certain regions. Under these conditions, the Statistical Agency, as a specialized organization, can initiate the integration of data from other departments into a single database on rural development.

Drastic solution of rural development problems may be provided by economically and socially attractive projects, associated with prestigious professions in rural society, career opportunities and high-priced labor. Since there are no real employment alternatives for rural population in most regions, the coordinating role should be taken by the Ministry of Agriculture of Russian Federation and its subordinate regional and local authorities.

Centralization of information and coordination of activities will help solving certain tasks in the framework of federal and regional programs of rural development even under the conditions of limited financial and other resources. Influence of state on rural development, including allocation of financial resources, in such a case may be based on comprehensive information about the presence and condition of rural social and other non-production infrastructure, and dynamics of its changes (both quantitative and qualitative).

The analysis of living standards in rural areas has to become an obligatory part of economic analysis of rural development. They have to be developed equivalent to the standard requirements to infrastructure in urban settlements.

**Conclusion.** The goals of rural territories sustainable development should be based their comparative advantages, search for growing-points, and support for priority development fields. Significant role in the justification of choosing these fields plays information and analytical support. Conducting a comprehensive economic analysis of rural development assume the determination of methodological problems associated with the selection of an analyzable object (village, rural settlement, municipality) and the development of research programs, including the selection of analytical indicators that adequately reflect the problems of rural development and allow different kinds of comparison, including international. Centralization of analytical information on economic, environmental, social conditions of rural areas promotes

the coordination of activity of different departments in order to develop sciencebased public policy for rural territories development.

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