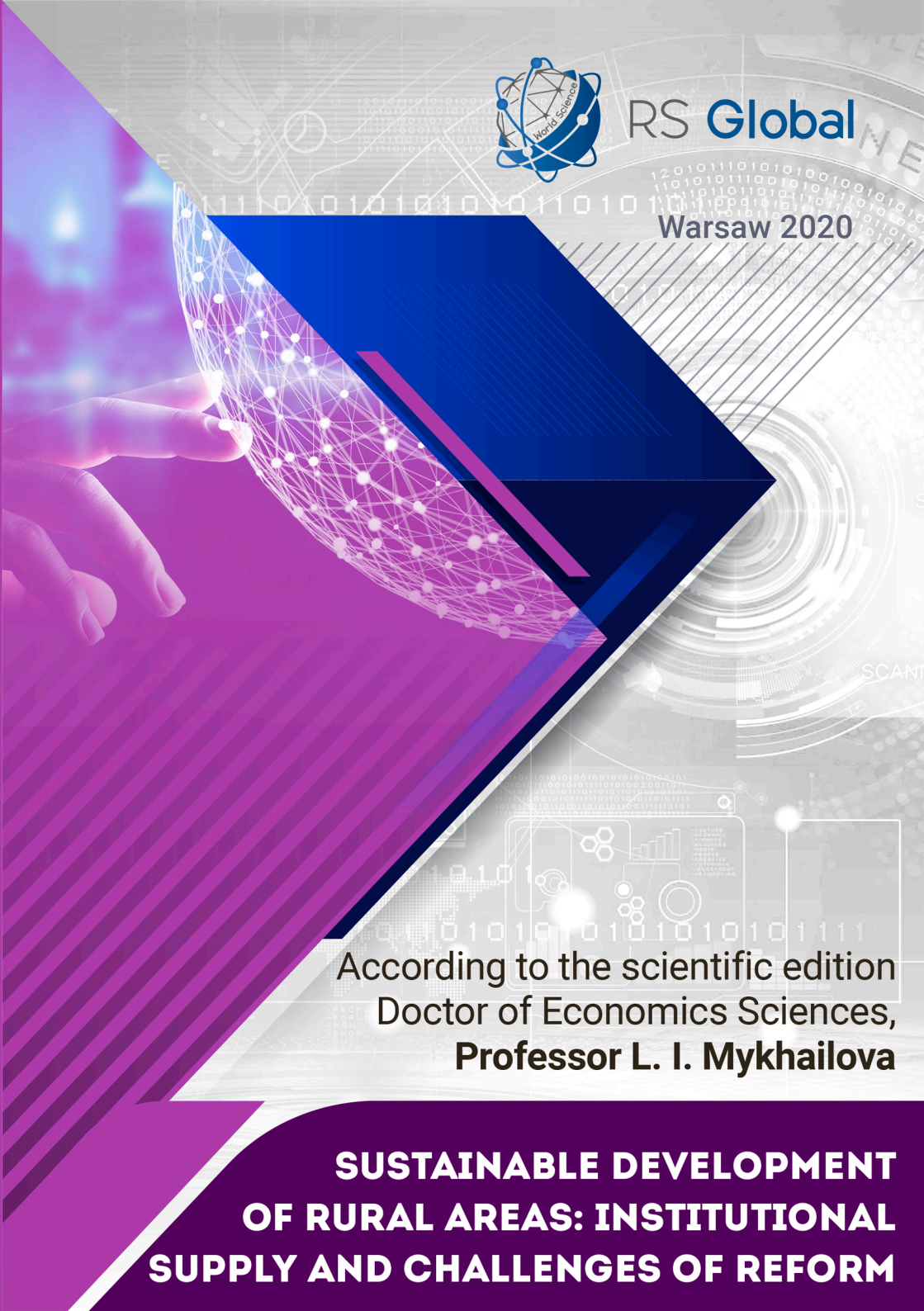

RS Global

Warsaw 2020

According to the scientific edition
Doctor of Economics Sciences,
Professor L. I. Mykhailova

SUSTAINABLE DEVELOPMENT OF RURAL AREAS: INSTITUTIONAL SUPPLY AND CHALLENGES OF REFORM

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T. M. Lozynska, Doctor Economics Sciences in Public Administration, Professor, Head of the Department of Public Administration of the Poltava State Agrarian Academy;
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I. M. Novak, Doctor of Economics Sciences, Professor, Head of Department of Management, Uman National University of Horticulture.

Authors: Mykhailova Liubov, Mykhailov Andrii, Kalachevska Larysa, Nataliya Stoyanets, Kharchenko Tetyana, Tkachenko Viktoriia, Yarmila Tkal, Yulia Abraham, Olena Slavkova and others.

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The monograph contains the results of researches conducted by scientists of Sumy National Agrarian University within the framework of the implementation of the state research theme "Institutional support of sustainable development of rural territories under the conditions of administrative and territorial reform" (state registration number 0117U004254, 2017–2019y.).
The monograph is devoted to the theoretical and practical basics of managing the sustainable development of rural territories at different levels, which are shaped by integration and globalization challenges. Peculiarities of ensuring sustainable development of rural territories under the conditions of administrative and territorial reform are outlined; highlights the basics of infrastructure management and innovation and investment development of regions in the context of sustainable development; directions of improvement of institutional support of sustainable development of rural territories under conditions of market transformations are determined; The urgent issues of ensuring the livelihoods of the rural population in relation to social security, development of education, and environmental protection are characterized.
For researchers, teachers, graduate students and students, business leaders and governing bodies of different levels, entrepreneurs and anyone interested in sustainable rural development.

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CONTENTS

INTRODUCTION

In today's economic environment, integration processes and globalization challenges are the most important and influential factors in world economic development, which is crucial for managerial decisions to ensure the sustainable development of rural areas. In the current conditions in Ukraine, the main focus of reforms, including administrative and territorial reform, should be to improve their social orientation, consistent reorientation of the rural economy to meet the needs of the population. Without qualitative changes in all areas of productive forces and industrial relations, it is impossible to ensure the sustainable development of rural areas and a good standard of living. In this context, the main objective of sustainable rural development policy should be to create a viable environment, in particular by improving the competitiveness of labor resources, creating a balanced labor market with clear social orientations, ensuring productive employment and social protection for the able-bodied population, promoting entrepreneurship and rural development. Preserving the environment for future generations.

The deepening of the degradation process of the village has led to the search for new research approaches within which the village, agriculture and peasantry would be considered in their unbroken unity. The concept of rural development as the basis of national and regional policy for sustainable development of rural territories is gradually being introduced in academia.

At the same time, the issues of forming a balanced rural labor market with clear social orientations, the problems of financing rural development processes, as well as the institutional framework for ensuring the sustainable development of rural regions remain under-researched. Insufficient attention is paid to substantiating the conceptual foundations of state rural development policy adequate to the multifunctional nature of rural areas; need to address the issue of infrastructure support in rural areas.

The presented monograph contains results of researches of actual problems of development of rural territories, organization of agricultural production on innovative bases and influence of its efficiency on the level of employment in rural areas in the conditions of adaptation of agrarian sector of the country to changes caused by market transformations and internationalization of world economic life.

The authors of the publication, summarizing the approaches of foreign and domestic scientists, also drawing on the results of thorough empirical research, formulate the prospects for solving the problems of sustainable rural development, indicating the threats and warnings. Much attention is paid in the monograph to the justification of the algorithm of formation of a qualitatively new model of development of infrastructure objects in rural areas by finding new owners.

Considering the importance of the problems of financial support for rural development, the monograph attempts to develop a mechanism for financial support for sustainable development of rural territories by using innovative

approaches to the service of agricultural producers and rural population as well. The materials presented in separate sections of the monograph are in one way or another related to the formation of an effective mechanism for supporting the socio-economic growth of depressed territories, reflecting the desire of researchers to reconcile their generalizations to the new conditions of the international system, the level of sustainable development, standards of working life and management in developed countries. From this point of view, the results of the research presented in the monograph are original and important.

The authors do not claim to be exhaustive in their opinions and judgments, since the practice of agro-management and the rapid progress of administrative-territorial reform in the country make daily adjustments to the theory and practice of managing sustainable development of rural territories.

The monograph combines very well the accessibility and scientific presentation. The monograph offers only specific approaches to addressing clearly defined problems of improving the management of sustainable development of rural territories at different levels of government on the way to implementing administrative-territorial reform in Ukraine.

The monograph was prepared based on the results of the research topic "Institutional support for sustainable development of rural territories under the conditions of administrative and territorial reform" (number of state registration 0117U004254, 2017–2019) by scientists of Sumy National Agrarian University.

We express our sincere thanks to the reviewers of this publication, T.M. Lozynska, Doctor of Science in Public Administration, Professor, Head of the Department of Public Administration and Administration of the Poltava State Agrarian Academy; V.Y. Medvid, Doctor of Economics, Professor, Department of Economics and Entrepreneurship, Sumy National Agrarian University; I.M. Novak, Doctor of Economics, Professor, Head of the Department of Management, Uman National University of Horticulture, whose critical remarks and advice helped to uncover what was conceived in separate sections and provisions of the monograph.

PREREQUISITES AND FACTORS OF POPULATION EMPLOYMENT DEVELOPMENT IN RURAL AREAS

Mykhailova Liubov
Doctor of Economic Sciences, Professor
Sumy National Agrarian University, Sumy, Ukraine

Assessment of the Ukrainian labor market highlights a number of problems that lead to the transformation of preconditions and factors for its development. On the one hand, the employment rate of the rural population is decreasing rapidly, and on the other hand, the heads of agricultural enterprises declare the lack of qualified personnel. Indeed, in today's context, most businesses are experiencing a shortage of skilled labor. In the educational system, there is a lack of educational content standards and quality requirements of real training time, pace and direction of production. In view of the worsening demographic situation, a progressive exacerbation of the imbalance in the labor market is evident, especially in rural areas, which poses a threat to the development of the entire economic system. This leads to a socially objective need to develop theoretical and methodological and methodological foundations of the regulatory policy of segmentation of the labor market in the agricultural sector, which should be the basis for practical actions aimed at dramatically improving the balance of labor potential of the industry and its effective use.

Theoretically, the process of population employment formation testifies to its ability to meet to some extent the needs of the economy in the socio-economic development of the state in the conditions of globalization and to solve the problem of economic growth of the country. In recent years, labor market indicators have continued to decline. This is in line with the socio-economic decline in Ukraine.

Practically, the process of employment formation of the Ukrainian population is carried out in the conditions of the ongoing globalization transformations in the country, characterized by negative consequences: rapid development of migration processes, deep and prolonged economic crisis, poor labor market situation, military aggression, unemployment, intensification of tax and business pressure, worsening conditions for entrepreneurship, ineffective current employment policy, job cuts, loss of opportunity to secure a decent retirement in the future in lack decent pay and, consequently, lower purchasing power, loss of desire to try to get a job again.

These circumstances serve as the starting point for formulating the purpose, object, object and objectives of the study. They focus on justifying decisions to address the problem of employment formation in rural areas in the short term.

The purpose of the research is to evaluate the prerequisites and factors for the development of employment in rural areas; outlining the prospects for the future state of the domestic labor market as a whole.

The object of the study is the basic laws of the processes of formation of employment of the population of Ukraine in the conditions of globalization of

economy and ensuring improvement of functioning of society as a whole. The subject for in-depth empirical research is relations in the domestic labor market with a focus on rural areas.

The subject of the study is a set of theoretical and methodological foundations and practical aspects of formation of employment of the Ukrainian population in the domestic labor market in the conditions of globalization of the economy.

Generalization of theoretical foundations and practical experience in forming the employment of the population showed that the main problems of the domestic labor market lie in the effectiveness of the preconditions and factors caused by the economic and socio-political processes in our country.

Military aggression, unemployment, increased tax and corruption pressure on business, deterioration of business conditions, inefficient current employment policies, job cuts, loss of opportunity to secure a decent retirement in the future, lack of decent pay and, as a consequence, reduced ability to work, income shortfalls, gender risks of job loss, loss of desire to try to get a job once again – all this has a negative impact on the economic activity of our population state and related to aspects of the unfulfilled labor potential of Ukraine, which generally impedes the development of society, reduces the quality of working life.

Let us consider the indicators of economic activity of the population in terms of gender division by the average for the first half of 2017 – 2018 (Table. 1).

Analysis of the data in Table 1. Showed that in the first half of 2017 – 2018 among the economically active population is dominated by men. Although there is a percentage change in favor of women in 2018, it is quite insignificant (only 0.5% of the total), which is explained by a decrease in the number of men in the structure of the economically active population by 65.1 thousand people this year, compared with the previous one.

In the domestic labor market, the employment rate for women in the surveyed period is lower than for men (9.7% in 2017 and 9.2% in 2018). The level of economic activity of women is also lower than men's (by 13.4% and 11.9%). This fact testifies to the existence of gender segregation in the economy of our country.

With regard to these figures, one cannot categorically assert discriminatory Ukrainian labor market against women. Despite the fact that the female unemployment rate is lower than the male unemployment rate (provided that the number of employed women is lower than the number of employed men: 7.8 million employed women against men – 8.3 million in the first half of 2017) and 7.9 million people versus 8.4 million in the first half of 2018).

It should be noted that during the period 1990-2018 the population of Ukraine decreased by 9452,1 thousand people (or 18.2%). The country's rural population decreased by 23.3% during this period. The main reason for these processes is job cuts.

Table 1. Economic activity of the population on the average for the first half of 2017 – 2018, (by sex breakdown)

Indicators	**The whole population**		**Women**				**Men**			
	2017	**2018**	**2017**	**in%**	**2018**	**in%**	**2017**	**in%**	**2018**	**in%**
1	2	3	4	5	6	7	8	9	10	11
Economically active population, thousand people	17830,6	17883,6	8425,6	47,3	8543,7	47,8	9405,0	52,7	9339,9	52,2
The level of economic activity, %	61.9	62,4	55,7	×	56.7	×	68,8	×	68,6	×
Busy population, thousand people	16120,9	16283,2	7775,8	48,2	7898,1	48,5	8345,1	51,8	8385,1	51,5
Employment rate, %	56,0	56,8	51,4	×	52,4	×	61,1	×	61,6	×
Unemployed population (according to ILO methodology), ths.	1709,7	1600,4	649,8	38,0	645,6	40,3	1059,9	62,0	954,8	59,7
Unemployment rate (ILO methodology), %	9.6	8.9	7.7	×	7,6	×	11.3	×	10.2	×

Source: compiled according to State Statistic Service [1]

In trying to survive in these conditions, people are forced to turn into labor migrants. It turns out that our “workers” are developing, above all, the economy of other countries, but not their own, while losing the opportunity to receive a pension, subsidy, unemployment assistance, and the opportunity to apply for a bank loan in Ukraine. In addition, people are not able to see each other for a long time, and sometimes to communicate, which leads to conflicts in families, psychological problems, or the breakup of families in general, which is a primary concern for children. It is thanks to “employment”, and not investment in fixed capital, that our country’s GDP grows, which is typical only for poor countries with underdeveloped labor markets.

It is worth noting that many foreign businesspersons (Turkey, China, etc.) are interested in our country today. They see the prospects of doing business in our country. Deregulation is needed to promote a transparent business, while avoiding corruption. Our authorities to encourage migrants to return, as very often these

people already have their own capital and may well start their own business at home, must create appropriate conditions.

In other words, it is profitable for Ukraine to make labor migration similar to "brain and labor circulation": leave, earn money, gain new knowledge and skills, return and open their businesses. Legislation in this area does not have much refinement at present.

It is therefore essential to develop an effective migration policy today in order to manage its effects and anticipate future changes. This policy must be based on reliable statistics. You should also take a combined approach, that is, at the same time create decent, decent-paying jobs; to take care of the level of social protection of people; increase the employment rate of the population; strengthen the institutions of government and the economy as a whole.

Today, Ukraine is one of the world's top ten migrant donor countries, losing not only its workforce and skilled personnel, but also gradually becoming a "human capital" supplier to European countries. And every year, this trend is gaining ground. The richer than our states, with better economic dynamics, attract labor resources.

Certainly, Ukrainians are looking for higher earnings prospects. In 2015-2017, our country left to earn about 1.3 million people. Most citizens prefer to make money in Poland and Russia (506.5 and 342.4 thousand, respectively). In third place Italy – 146.7 thousand people, followed by the Czech Republic – 122.5 thousand people. The number of migrants to the United States is 23500 persons, Italy – 22500 people, Portugal – 20300 persons, Hungary – 17100 persons, Finland – 13300 persons, Germany – 10200 people and 13900 people in Israel [1].

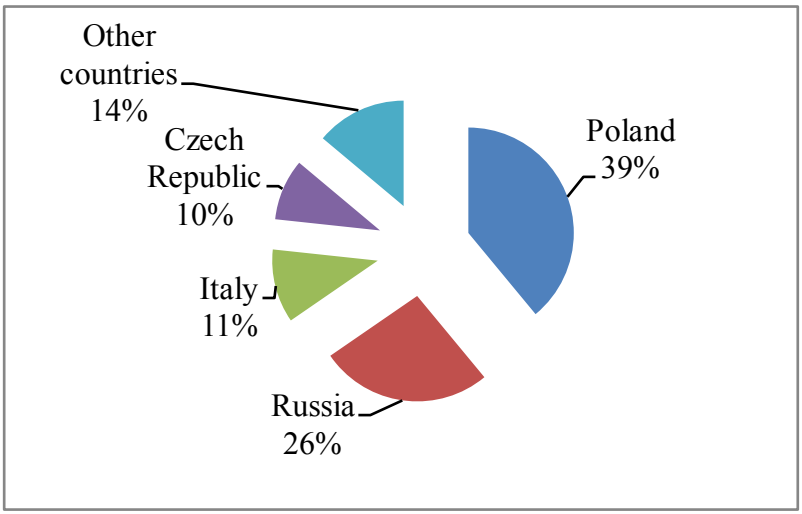

Fig. 1. Countries where Ukrainians migrated in 2015-2017

Source: by the author in [1]

At the same time, according to the Ministry of Family, Labor and Social Policy of Poland, the share of Ukrainians who have received a work permit in Poland among all foreigners is 94% (1824.5 people).

Simplification of the legislation of the countries of Eastern Europe, hostilities in the Donbass, annexation of the Crimea significantly influenced the structure of migration flows. The main migration flow has changed the direction in favor of Poland, although Russia is still popular (Fig.1). In general, during the study period, the number of migrant workers has tripled, in the western direction they go 42% more often.

It turns out that our "workers" are primarily building the economy of other countries, not their own. And it is thanks to "employment", not investment in fixed capital, that Ukraine's GDP grows, which is typical only for poor countries with underdeveloped labor markets. According to the National Bank of Ukraine, in 2015-2017, remittances of labor migrants to Ukraine annually ranged from $ 7.0 to $ 9.3 billion of USA, i.e. from 7.6% to 8.4% of the state's GDP. The rapid migration rate confirms the reduction of economically active population from 19 million people at the end of 2014 to 17.1 million people at the beginning of 2nd quarter of 2018, up 10% (≈ 2 million).

That is, for Ukraine favorably, so that labor migration has become like a "circulation of brains and hands": left – earned money – gained new knowledge and skills – back and opened his business. Legislation in this area has numerous drawbacks.

In the field of employment, the problem of gender equality is particularly urgent, since in no field is discrimination as acute as in employment. For example, gender inequality in the labor market is, on the one hand, one of the results of social development and, on the other, the source of many problems affecting the functioning of the labor market.

Studies of the Institute of Sociology of the National Academy of Sciences of Ukraine, which have been monitored since 1992, indicate that about 60% of Ukrainians cannot find a job in the specialty. Employers' involvement in training, which was previously up to 60% of total investment, has almost ceased. In fact, today is the time to update educational programs in line with market needs [2].

It is estimated that more than 7 million jobs, mainly related to office and administrative functions, manufacturing and manufacturing, and healthcare (as a result of the introduction of telemedicine, will be threatened in the largest countries in the next five years). Growth is expected in areas such as computer and mathematical sciences, architecture and engineering. Most jobs are expected to be created in the fields of information and communication technology, professional services, media, entertainment and computer science.

In this scenario, women will lose their jobs because they are less likely to find jobs in sectors where the introduction of new technologies will help to create new jobs. Therefore, appropriate recruitment, retention and promotion programs should be implemented, and funds should be allocated for training women with new professional skills. Otherwise, it will increase the gender gap among the employed [2].

The EU has forecast changes in employment by 2025 that Ukraine needs to prepare well for. After all, new technologies and globalization are significantly transforming work for women and men.

Ukraine already needs to study the professions of the future and start with the following algorithm:

1) choosing a model of economic development;

2) identification of priority areas;

3) public and private procurement for appropriate education;

4) preparation of programs for promoting employment of the population, which are currently implemented through the social sphere.

The imbalance of supply and demand in the labor market leads to an increase in structural unemployment and the level of external labor migration. In order to ensure at least 6-7% annual growth rate, Ukraine needs to build a high-tech and export-oriented model of economy, ie to train more scientists, engineers, programmers, and educators [2].

The unfolding Industrial Revolution will continue to affect workers differently. It is critically important to ensure that Ukraine does not lag behind in training new skilled personnel and develop new talent, giving women and men the opportunity to compete in today's rapidly changing world [3].

However, the problem of regulation of alternative employment in rural areas remains open. At present, the institutional aspect of socio-economic development of the regions of Ukraine in the context of alternative employment regulation is being considered in the state regional programs of development of small and medium-sized enterprises, namely in support of the direction of rural green tourism. While unremarked are those types of alternative employment such as hunting and fishing, as well as the collection of forest berries, mushrooms and forestry raw materials.

The proliferation of alternative employment requires appropriate government regulation aimed at maintaining a balance between the requirements of economic development and social stability at the national level. At the same time, there are restrictions on obtaining statistical information on alternative employment in rural areas. Thus, based on the presented material, an important question arises to take into account the principles and instruments of state regulation of employment as a vector of reproduction of labor potential of rural territories.

In this regard, it is necessary to develop a strategy for improving the structure of alternative employment, which will become a necessary step to solve many problems in the current labor market. The appropriate strategy should be based on the principles and tools of forming a flexible employment structure, the expected results of which are based on the consistent actions of the legal framework and the effective institutional environment.

Priority directions of the state policy for promoting alternative employment of rural population are:

- economic (effective budgetary policy to encourage employers to create jobs, carry out professional training of staff; preferential taxation and crediting);

- social (intensifying work to reduce rural unemployment, providing quality social support to the unemployed population to return to economic activity).

An important aspect is to ensure that the rural economy is balanced in the direction of the social security system in favor of alternative employment for the rural population.

We have to note, that in the countries, that operate for more than a century in market relations, precisely to protect the interests of employees – they use tools to create their own material security in case of various risks of a social nature. Significantly, in addition to the social insurance system, in particular in Germany, the United Kingdom and other developed countries, a component of state social policy is the policy of promoting savings. The most important and appropriate measures for the country include:

- exemption of employers who are involved in stimulating the accumulation of employees from deductions for their wages;

- inclusion in collective agreements of issues of stimulation of accumulation by reservation of a part of a salary (failure to hand) for the purpose of its investment in the capital of one or another enterprise.

According to these approaches, employees become co-owners of enterprises; state co-payments (incentives) are made to the contributions of persons employed [4].

Particular attention should be paid to organizational issues, namely the state promotion of the personnel system of training, retraining and career guidance of staff. Because of our long-standing research, fewer and fewer agricultural workers, that is, rural residents, are raising their educational and professional levels compared to those in industry and the national economy as a whole, which has an impact on the level of labor potential, causing degradation of human capital and reducing the national security of the country [5]. The issue of regulation of interregional labor migration and the creation of an automated database of job vacancies for alternative employment are noteworthy.

Thus, the implementation of the above-mentioned directions will serve to improve the employment structure of the rural population.

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CONCEPTUAL APPROACHES TO MANAGING SUSTAINABLE RURAL DEVELOPMENT IN THE CONDITIONS OF ADMINISTRATIVE-TERRITORIAL REFORM

Mykhailov Andrii
Doctor of Economic Sciences, Professor
Sumy National Agrarian University, Sumy, Ukraine

Rural development is an integral part of each country's agricultural policy aimed at improving the quality of life of the population. Depending on the level of welfare of the nation and the economic development of society, the state builds an acceptable model for managing sustainable development of rural areas. In recent decades, other terms reflecting the essence of rural development have begun to enter into the theory and practice of governance: rural development, rural development, rural socio-economic infrastructure development, sustainable rural development, and so on. At the same time, ongoing agrarian transformations are changing the system of rural development management in Ukraine. The impetus for finding new approaches in regional governance and elaboration of sustainable rural development models was the introduction of administrative-territorial reform measures in the country, which led to a certain intensification of research into the theoretical and methodological foundations of sustainable rural development.

Messel-Veselyak and Fedorov point out that the agriculture of Ukraine in the Soviet times was based on two forms of management – collective farms and state farms, which worked on state land using respectively cooperative and state property. Socialized means of production turned into essentially no-man's property, which, in combination with administrative and command methods of management, led to the loss of personal interest of the peasants to increase the efficiency of production and caused the need for transformation of agriculture to market conditions [1, p.38]. According to Malik M.I., agrarian transformations aimed at enhancing entrepreneurial activity made it possible to provide stable positive dynamics of agricultural production growth [2, p.97].

Modern economic, scientific, and technological development of the agrarian sector is characterized by globalization of the market, aggravation of competition of producers, increase in the number of employees engaged in highly skilled labor, increase in the level of technological production, distribution of comprehensive operational information.

Conceptual approaches to managing the sustainable development of rural areas should be based on the use of all its constituent assets: agricultural production, which creates the most necessary tangible assets – products for life support; intangible values: production of ecological and recreational services with preserved original landscapes and cultural heritage, which is a prerequisite for the multifunctionality of rural development; implementation of environmental initiatives of the population aimed at protecting the environment for future

generations; the formation, conservation and development of human capital as a major factor in the economic growth of regions or the country as a whole.

Recently, international organizations, institutions and scientists have been paying close attention to food security and sustainable development. It is clear that expert opinions and judgments on this matter are very different, due to differences in socio-economic conditions of individual countries and the purpose of the representatives. At the international level, many institutions and organizations are involved in food security and sustainable development. The most specialized is the FAO UN, which assists in technical and food aid, develops forecasts for the development of world agriculture and collects statistics on trends in its condition. The concept of "food security" has been considered by representatives of this organization through different prisms of perception at different times. Yes, in 1974 it was Availability, in 1983 it was Access, and in 1996 it was Sufficiency [3].

The concept of sustainable development reflects the main modern trend of world development. As defined by the Brundtland Commission, presented in the report "Our Common Future", prepared for the United Nations and published in 1987 by the International Commission on the Environment and Development, sustainable development is a development that meets the needs of the present generation without threatening the ability of future generations to meet their needs. Own needs. The concept of sustainable development has three components: economic, social and environmental. Therefore, this development involves a comprehensive solution to economic, social and environmental problems, the achievement of equilibrium and balance between them, as well as the obligation of the present generations to leave in the future sufficient resources necessary to ensure a level of well-being not less than existing.

It is well known that the concept of sustainable development was acquired as a result of the organization of Johannesburg, South Africa, from 26 August to 4 September 2002. The World Summit on Sustainable Development, WSSD or ONG Earth Summit 2002, was held to discuss the issue of United Nations sustainable development [4].

The Earth 2012 Summit is the third international conference on sustainable development aimed at reconciling the economic and environmental goals of the global community. Conducted by Brazil in Rio de Janeiro from 13 to 22 June 2012, Rio + 20 is the 20th Annual Summit of the 1992 UN / Environment and Development Conference (UNCED) the same city, and the 10th anniversary of the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg. The main result of the conference was the document "The future we seek" 49-page working document [5]. In it, the Heads of State of the 192 governments of the participating countries reiterated their political commitment to sustainable development and declared their commitment to promoting a sustainable future. This document largely confirms previous plans of action, such as the Agenda for the 21st Century.

The Sustainable Development Goals (SDGs), formally known as the transformation of our world: the 2030 Agenda for Sustainable Development is 17 global goals, detailing 169 intermediate targets [6].

Strategic priorities for sustainable rural development, which is today a trend of socio-economic policies at the international and national levels of developed countries. They are based on the conceptual provisions of the 17 UN Sustainable Development Goals, adapted to Ukraine's Sustainable Development Goals, the draft Law of Ukraine "On Ukraine's Sustainable Development Strategy to 2030" and Presidential Decree No. 722/2019 "On Ukraine's Sustainable Development Goals up to 2030» [7]. The strategic goal of sustainable rural development is to ensure balanced economic, demographic, social and environmental development of rural areas.

Mogilova M.M. in the report "Strategic priorities for sustainable rural development for the period up to 2025" notes that in 2015 the Cabinet of Ministers of Ukraine approved the Concept of Rural Development, which was developed with the active participation of the Institute. The implementation of its provisions and the Action Plan to the Concept (in particular paragraph 29) requires the development of an appropriate Strategy.

Against this background, the NSC's Institute for Agrarian Economics substantiates the strategic priorities for sustainable rural development, which today is a trend of socio-economic policies at the international and national levels of developed countries. They are based on the conceptual provisions of the 17 UN Sustainable Development Goals, adapted to Ukraine's Sustainable Development Goals, the draft Law of Ukraine "On the Strategy for Sustainable Development of Ukraine to 2030" and the National Sustainable Development Paradigm of Ukraine Fig. 1. [8].

In the current conditions of implementation of measures on administrative-territorial reform in Ukraine, the responsibility for rural development should be entrusted to regional governing bodies; Considering the limited possibilities of presenting the views in this article, we consider it appropriate to emphasize the importance of management and to emphasize again its decisive role in the effective development of a certain management object: organization, industry, region, country as a whole.

Therefore, we will try to present our understanding of the essence of regional management as a kind of management activity aimed at ensuring the sustainable development of territories using its features to improve the quality of life of the population.

In modern conditions, rural development in the system of regional management of the country is a factor in the formation of safe food in sufficient quantity for the population of the country, preserving the welfare of the rural population, reducing its poverty, improving the environment, preserving the peasantry as a carrier of Ukrainian identity, bakery culture and spirituality. These provisions formulate in a certain way the mission of regional governance, in order to achieve the goals and specific objectives at the highest levels of government.

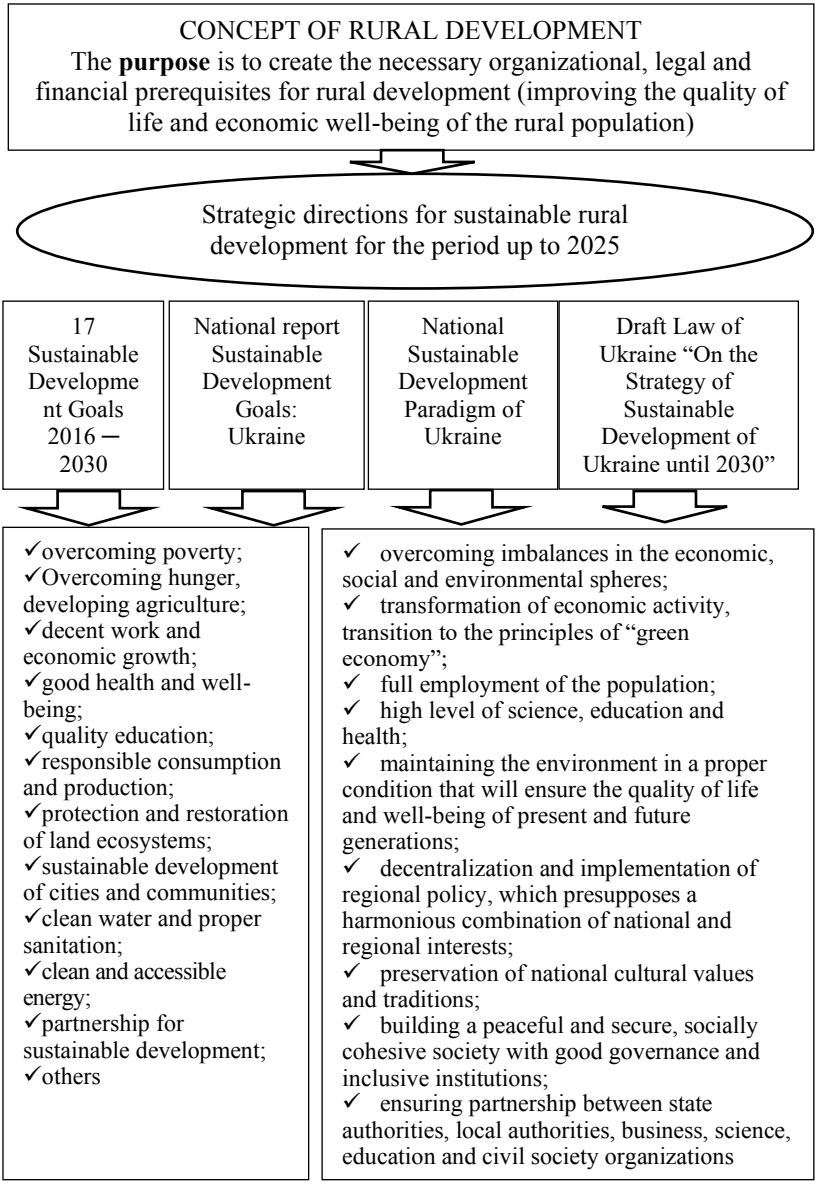

Fig. 1. The concept of rural development [8]

Based on the fundamental provisions of management science, we believe that the basic principles of management – a set of guiding ideas and definite guidelines that

should be guided by managers in making management decisions. In this case, the central element in the system of administrative decision-making should be a person, which provides for the isolation of the most important principle in the system of management of sustainable development of rural territories – human-centrism. We consider it appropriate to refer to the basic principles of regional governance as follows:

- a systematic approach that assumes the perception of individual entities and entities in a given territory (economic entities, communities, life support facilities, etc.) as a whole, interconnected functioning of which ensures sustainable development;
- equilibrium – is to achieve the harmonization of interests of individuals, communities, individual professional groups, local and state government bodies in order to ensure balanced (balanced) sustainable rural development of certain territories;
- comprehensiveness – to be applied in addressing the social, economic and environmental problems of sustainable rural development; in the formation of production, environmental, socio-cultural components of the program of development of a certain territory;
- Innovation – the constant change of environmental conditions is a prerequisite for the transformation of management technologies to be applied in regional governance;
- team building, which involves collaboration and organization of communications, which are required for the initiation, organization and project support of sustainable rural development processes. This principle is of particular importance and is directly linked to the implementation of the principle of person centrism – centrist nature of sustainable rural development

Modern economic, scientific and technological development of the agrarian sector is characterized by globalization of the market, aggravation of competition of producers, increase in the number of employees engaged in highly skilled labor, increase in the level of technological production, distribution of comprehensive operational information.

Increasing the competitiveness of domestic agrarian production is to create the conditions for increasing the overall level of productivity of the sector on the basis of sustainability, with a harmonious combination of different sectors of agriculture and types of farms (large, medium and small), when each of them occupies the most specific market niche. This combination should open opportunities for rational utilization of land-resource potential, as well as creation of conditions for equal access of producers to technological and organizational innovations, finances, market infrastructure, benefits from export of products.

Agricultural production is inextricably linked to entrepreneurship. In addition, the latter is the basis for the development of market relations and the main source of income for most villagers [9].

The current economic and social situation of our country as a whole is very complicated, not to mention the villages and its population. In order to overcome this situation, it is proposed to apply a model of effective functioning of rural

territories throughout the country, which will facilitate the life of rural population and reduce the budgetary burden of the country in various areas of financing.

To date, decentralization reform is underway in Ukraine, leading to the creation of unified territorial communities across the country. In December 2019. The first phase of decentralization reform, involving voluntary community reunification, is coming to an end. As of 2020, as envisaged in the plan for a new phase of decentralization, decisions on community unification will be taken at the state level.

The planned decentralization reform will contribute to the qualitative improvement of the living environment for the residents of the community, creation of real conditions for comprehensive development of territories and human resources, formation of the principles of effective local self-government [10].

But now the population still does not fully understand what this reform is and where the village councils really need to go. In fact, when CTAs are created, some village councils are reluctant to take various reasons to the community, and this is currently delaying this reform. People are also worried about reducing the number of village and town councils. It's no secret that fewer structures are easier to manage and easier to control. So, the declared decentralization of power has actually become more like centralization.

At present, the development of economic activity is characterized by a number of different difficulties and problems that arise in the production of agricultural products in villages. The main problems are the lack of financial, technological, intellectual, information resources and the limited capacity to create new or develop existing enterprises on an innovative basis, negative influence of factors of external and internal environment.

In the economic literature, there are several main factors influencing the formation of the entrepreneurial environment. These are environmental, economic, socio-cultural, demographic, financial, credit, state and political factors.

Agriculture directly or indirectly affects the development of absolutely all spheres of social life in the countryside, and agricultural production remains the main area of employment for the rural population. One of the main prerequisites for ensuring the development of rural areas is the effective functioning of agricultural enterprises.

In the context of territorial-administrative reform, the financial capacity of the united territorial communities to develop rural areas is of fundamental importance (Table 1).

Table 1. Dynamics of development of own accessible united public communities [8], %

Payments to the budget	2016	2017	2018
Income tax of Individuals	34,2	40,6	56,9
Single tax	21,4	20,6	15,8
Payment for land	23,8	21,0	14,4
Excise tax	14,6	11,8	7,4
Real estate tax	1,6	1,9	1,8

It Is possible to identify promising sources of increase in the financial resources of the communities by assessing the structure of own income of the LTG, in which over 70% in 2018 accounted for the tax on the income of individuals and a single tax.

Therefore, determining the maximum full and productive employment and at the expense of this increase in rural incomes is a decisive factor for the growth of income.

The problem of rural poverty, which is widespread and sustainable, remains unsolved and leads to disastrous changes in the long-term effect. Traditionally, aggregate resources and household cash income in urban areas are greater than in rural areas (7-10%)

The level of wages in agriculture, as the main sphere of application of peasant labor, is below the national average (by 23-40% in the last 5 years). The income from entrepreneurial activity in the countryside does not exceed 6% of total income.

The diversification of the rural economy is related to the development of rural entrepreneurship (Table 2).

Table 2. Business entities in agriculture of Ukraine

Agricultural enterprises	2000		2015		2016		2017		2017 to 2000, + / -, %	
	Quantity, units	Share, %	Quantity, units	Share, %	Quantity, units	Share, %	Quantity, units	Share, %	Quantity, units	Share, %
Total	51588	100,0	45379	100,0	47697	100,0	45558	100,0	-6030	88
Business partnership	6718	13,0	7721	17,0	8700	18,2	6967	15,3	249	104
Private enterprises	2519	4,9	3627	8,0	3752	7,9	3215	7,1	696	128
Production cooperatives	3136	6,1	596	1,3	738	1,5	448	1,0	-2688	14
Farms	38428	74,5	32303	71,2	33682	70,6	34137	74,9	-4291	89
State-owned enterprises	385	0,7	241	0,5	222	0,5	199	0,4	-186	52
Enterprises of other forms of management	402	0,8	891	2,0	603	1,3	592	1,3	190	147

Source: Formed according to the State Statistics Service

Due to the distortions of competition for small and medium-sized businesses, the lack of necessary institutional conditions for self-realization of the potential of the economically active population has been stagnant since 2000.

According to the strategic priority "Logistical support for the development of production and rural territories" (Table 3), the main target indicators are: a scientifically substantiated need for fixed assets for agricultural enterprises and households (respectively $ 46 and $ 19 billion or 1245 and UAH 514 billion), as well as raising up to 50% of the level of provision of agricultural production with environmentally friendly means of production.

Table 3. Logistical support for the development of production and rural areas [8]

Purposes	Indicators	Targets (2025)
Quantitative and qualitative growth of capital equipment of the industry at the level that ensures timely and qualitative execution of the full range of agricultural work on modern environmentally safe technologies, the formation of material and technical bases for their entrepreneurial activity in OSG	✓ Formation of logistical base in accordance with regulatory requirements	Increasing the volume of fixed assets to the level of regulatory needs: - in agricultural enterprises – UAH 1245.3 billion; - in households in rural areas – UAH 513.6 billion.
	✓ Increasing the level of technical support, including domestic production	Achievement of an annual technological need for technical means, providing a technological need for domestic production equipment at the level of 55%
	✓ Increasing the level of provision of agricultural production with environmentally friendly means of production	Security of agricultural production with the basic means that meet the EU environmental standards at 50%

In turn, achieving this priority is not possible without adequate investment support (Table 4).

Table 4 presents the objectives for the Strategic Investment Priority with target indicators, the most important of which is the increase in the level of provision of agricultural production with capital investments to USD 160-230 per 1 ha of agricultural land.

Table 4. Investment support for agricultural production development [8]

Purposes	Indicators	Targets (2025)
Creating the necessary conditions for increasing the high-tech and export-oriented production of agricultural products and their processing products, meeting the needs of these products of domestic consumers, increasing jobs and income of employees	✓ level of provision of agricultural production with capital investments; ✓ increase of capital investments for the development of agricultural production; ✓ increase of investment opportunities of producers and achievement of optimum balance between their own and attracted sources of financing; ✓ formation of an effective mechanism for supporting small agribusiness investments; ✓ increase of investments in development of production, storage and processing of agricultural products in rural areas	- increase in the level of provision of agricultural production with capital investments to $ 160-230 per 1 ha of agricultural land; - increase of capital investments for the development of agricultural production in prices in 2017 in 2020 – 75, and in 2025 – 97 billion UAH; - steady growth rates of capital investment in agricultural production at the level of% per year; - ratio of own and attracted sources of financing investments of producers 2: 1; - Ensuring that the needs of private farmers and farms in the attracted sources of financing investments in 2020 by 65, and in 2025 – by 100% due to the mechanism of support for small agribusiness investments

In the context of dynamic changes in production technologies, demand in the market for agricultural products, legislative norms, the need for advisory services (Table 5) increases.

The strategic priority “Development of agricultural information and advisory (advisory) activity” justifies the need to create an effective system of advisory services on a mixed model, in which the central element should be formed in the NAAS developed state constituent, to cover the socially-directed advisory services of 90% rural population.

Table 5. Development of agricultural information and advisory activities [8]

Purposes	Indicators	Targets (2025)
Formation of an effective system of providing advisory services to business entities, rural population and OTGs on improving the practical skills of high-income (profitable) agricultural and other socially responsible activities	✓ A holistic advisory system developed locally. ✓ Number of advisers and experts – advisers. ✓ Percentage of consultancy coverage. ✓ Increase in budget revenues at different levels.	- Creating an effective mixed-model advisory system in which a developed state component is to be created as a central link in the NAAS. - coverage of 90% of agricultural producers and rural population by socially directed advisory services - an increase in the number of advisers and expert advisers to 2,700. - additional revenues to the budgets of different levels from the improvement of agricultural activity and business development in the countryside – UAH 6.0 billion.

At present, problems such as the lack of a locally-based advisory system in Ukraine, as foreseen by the Ukraine-EU agreement, remain unresolved. The confirmation is created with the help of International-technical Aid's projects by a network of local advisory services (private, public), which has not been developed at the local (region, OTG) level, and due to inadequate state support and financial inability of small agricultural enterprises and rural residents to pay advisory services independently its activities. A significant factor in the development of rural areas is the low level of coverage of advisory services due to the lack of advisory services and advisers, which impedes the development of small-scale rural businesses. Confirmation is the fact that the yield of agricultural crops produced by farmers is lower by 20-30%, and labor productivity in households is an order of magnitude lower than in agricultural enterprises. Access to government funding is difficult for them: out of UAH 6.3 billion allocated for such programs in 2018, only 14% (about UAH 887 million as of end-September) has been utilized, which led to the revision of the State Budget with diminished financial support for small businesses in the countryside.

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SUSTAINABLE LONG-TERM CARE INSURANCE IN JAPAN: EXPERIENCE AND ENLIGHTENMENT

Haiyan Yin, PhD student
Sumy National Agricultural University, Sumy, Ukraine
HeNan Institute of Science and Technology, Henan, China
Zhiping Huo, PhD student
Sumy National Agricultural University, Sumy, Ukraine
HeNan Institute of Science and Technology, Henan, China
Andrii Mykhailov, Doctor of Economic Sciences, Professor
Sumy National Agricultural University, Sumy, Ukraine
Xiumin Yan, Doctor of Economic Sciences, Professor
HeNan Institute of Science and Technology, Henan, China

Abstract. Japan is a typical representative country of social long-term care insurance, and its long-term care insurance system has important reference significance for the construction of China's long-term care insurance system. Research on Japan's long-term care insurance, starting with its social background, introduces the policy design of long-term care insurance; include the coverage and payment conditions of long-term care insurance, service items and insurance benefits, caring needs assessment and care plan formulation and funding mechanism. This paper summarizes the achievements and problems of the long term care insurance system in Japan and puts forward the reform direction. China should build a long-term care insurance system with Chinese characteristics. The system should adhere to the concept of top-level design, systematically, based on long-term care insurance legislation, to achieve the socialization of long-term care services, set up diversified and humane elderly care projects, to ensure the health of the elderly aging.
Keywords: Long-Term Care Insurance, Aging, Japan, Sustainable Development, Rural Area.

Caring is called «nurse» in Japan, and the meaning of care in Japanese is the dual concept of comprehensive body care and housekeeping services. Japan entered the ageing society as early as 1970, 30 years earlier than China. One out of every three Japanese is an elderly person over the age of 60. The deepening of the aging population has led to an increase in the number of disabled elderly people who need care. The decline in the number of families and the increase in the employment rate of women make the traditional model of care for the disabled elderly by their relatives unsustainable. Since Japanese medical insurance is free for hospitalization for the elderly over 60 years old, a large number of elderly people have been hospitalized for a long time, resulting in a sharp increase in medical expenses, resulting in social hospitalization and waste of medical resources. In response to the above situation, the Japanese Parliament passed the «Care Insurance Law» in 1999

and was officially implemented on April 1 in the next year. Later, in 2005, the «Insurance Amendment Act» was introduced to supplement and revise the Long-Term Care Insurance Law. So far, Japan's long-term care insurance has been included in the scope of social insurance, becoming the second country to implement social long-term care insurance after Germany [1].

1. The background of implementing long-term care insurance in Japan

Increased population aging. With the decline in the birth rate, the development of medical technology and the improvement of people's living standards, the average life expectancy of Japanese people continues to increase. According to the statistics of the World Health Organization, Japan's life expectancy is ranked first in the world in 2018 once again. Figure 1 details the average life expectancy of Japanese men and women in the past ten years.

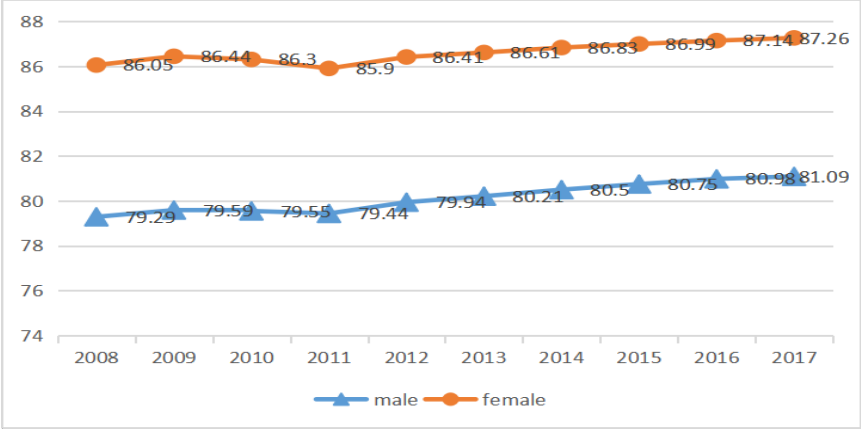

Fig. 1. Curve of life expectancy of men and women in Japan in recent ten years

It is not difficult to observe from the above figure that the average life expectancy of Japanese women in 2017 is as high as 87.26 years old, and the average life expectancy of Japanese men is also over 80 years old. It is predicted that the average life expectancy of Japanese people will be extended to 84.19 years old for men and 90.93 years old for women in 2060. In addition, as people born in the "baby boom" period after world war II (1947-1949) gradually entered the old age, the aging speed of Japan gradually accelerated. In 2010, the growth rate of the elderly over 60 years old in Japan was 30.5%, which is expected to reach 35.5% by 2025 [2]. This means that in the near future, there will be one elderly person in every three people in Japan. In addition, the elderly population aged over 75 has seen the fastest growth in terms of the structure of the elderly population, and this group is most likely to require long-term care.

The function of home care is weakened. After World War II, great changes have taken place in Japan's family structure, and the weakening trend of family care function has become increasingly significant. In traditional Japanese society,

bedridden elderly people rely mainly on family members for care. This kind of caring method still occupied the mainstream of Japanese society for a long period of history after World War II. However, with the constant changes in the Japanese family structure since the end of the war, the number of traditional families has decreased and the number of nuclear families has increased. Especially since the beginning of the 21st century, the number of elderly families, single families and couples families has increased, and families with children have decreased substantially. It is not realistic to rely on family members to care for the elderly.

Japan's Ministry of Internal Affairs and Communication's National Survey in 2010 showed that Japan's single-family households accounted for the most, accounting for 32.4% of the average family; followed by couples and children's nuclear families, accounting for 27.9%; the third was a couple's two-person family, accounting for 19.8. %. Along with the change of family structure, the nursing function of family members gradually declines. It has become very difficult to rely only on family members to provide care for the elderly, and the concept of young people supporting the elderly in Japan is becoming increasingly weak. In addition, Japanese society has long been prevailing in the «Men's work centers around outside, women's work centers around the home» mode of gender division of labor, the care of the elderly mainly rely on the daughter or daughter-in-law.

However, with the continuous improvement of women's education level, women's social status and family status have been greatly improved. The trend of highly educated women and the increasing employment rate of women have brought about great changes in women's lifestyle. Most women wanted to be professional housewives, but now they want to have both work and family, the mode of old-age care mainly undertaken by women has changed [3].

The original old-age security system has drawbacks. The old age security system in Japan has some disadvantages, so the construction of long-term care insurance system is inevitable. Before the establishment of Japan's long-term care insurance system, long-term care for the elderly was mainly provided by the welfare system and the medical care system for the elderly, both of which were imperfect and deficient in the face of new aging problems. Specifically, the welfare system has the problems of weak free choice, low service level and high service price. The municipal government or the SAR government shall decide the types and providers of services in the welfare system, and users shall not be free to choose. At the same time, the nursing service process lacks competition and the nursing level is difficult to improve. In the aspect of medical care system, due to the insufficient infrastructure of nursing service and the price of medical care is lower than that of nursing service, the phenomenon of «socialized hospitalization» increases, that is, the elderly with nursing service demand choose to be hospitalized in the hospital for a long time. It reduces the utilization rate of medical resources and increases the financial burden of the government.

High medical cost. High medical cost is a necessary condition for Japan to implement a long-term care insurance policy. Before the implementation of the long-term care insurance system, Japan mainly responded to the growing demand for aged care through the elderly medical insurance system. Due to the lack of social care facilities and home care services, many elderly patients have to stay in hospitals for a long time after the end of treatment, and elderly patients stay in hospitals for more than one year [4]. This phenomenon of hospitalization for a long time is called «social hospitalization». The hospital has become the place where most elderly people receive long-term care, which puts heavy pressure on the medical insurance system and causes medical expenses to soar. According to Ogura and Suzuki's research report, the cost of receiving long-term care for the elderly is one-third of all health care expenditures, and the average health expenditure is five times that of young people. Obviously, in order to control health expenditures, Japan urgently needs to establish a care system to provide reasonable long-term care facilities and home care services.

2. Policy design for long-term care insurance in Japan. To ensure the scientific and complete design of the long-term care insurance policy, the Ministry of Health and the Ministry of Labor and Welfare have defined the basic objectives of the long-term care insurance policy. The specific performance is as follows: First, in order to reduce the burden of home care, the government undertakes part of the elderly care. Responsibility to achieve social risk of mutual care; second, establish a cost-sharing mechanism for long-term care, to achieve transparent relationship between beneficiaries and contributors; third, to achieve organic integration of medical care and social services; fourth, to reverse the long-term detention of the elderly in hospitals due to the lack of long-term care facilities and services; Fifth, cancel the household-tested, avoid welfare stigmatization, and ensuring unrestricted access to care services for the elderly; sixth, give the elderly the right to choose their own care services, allow and encourage private companies to enter the aged care market, introduce competition mechanisms for service providers, and improve service quality.

Coverage and payment conditions. The Long-Term Care Insurance Law (hereinafter referred to as the «Act») clearly defines the coverage and payment conditions of the insured. Age is an important criterion to determine the coverage of the system. The act stipulates that all citizens who are over 40 years of age must participate in insurance [5]. Among them, the insured objects are mainly divided into two categories: the first type of insured persons and the second type of insured persons, the conditions of obtaining insurance payment for each type of insured persons are quite different, as shown in table 1. Citizens under 40 who are physically disabled and require long-term care are provided by other welfare schemes.

Table 1. Japanese long-term care insurance objects and conditions of payment

	First insurance object	Second insurance object
Classification	More than 65 – year – old	40-64 years old, covered by medical insurance
Target	Infirm, dementia, disabled person	15 chronic diseases caused by old age

Service items and insurance payments. Long-term care insurance provides services mainly including home-based services and institution-based facilities and services, each of which contains several sub-services. The items and services covered by home care are detailed in Table 2. Institutional care services mainly include the following three items: First, care for the welfare facilities for the elderly. It is mainly for those who do not have serious physical and mental illnesses, and needs care at any time in their daily lives. However, when they have difficulty in home care, they can enter the facility to receive the service. Second, they care for the elderly health care facilities. Mainly suitable for groups with stable conditions, receive medical treatment and care in facilities to return home as soon as possible; the third is to care for the elderly medical care facilities. Mainly for people with Alzheimer's disease and other chronic diseases, they need to receive long-term care and care in the facility.

Table 2. Japan's long-term care insurance service content

	To support service content	To care for service content
	Home service	Home service
Prefectural management services	1. Bathing service, care service, and guided rehabilitation training 2. Home treatment 3. Short-term institutional care services 4. Daily care for elderly specific institutions 5. Purchase and lease of medical rehabilitation equipment	1. Bathing service, care service, and guided rehabilitation training 2. Home treatment 3. Short-term institutional care services 4. Daily care for elderly specific institutions 5. Purchase and lease of medical rehabilitation equipment Home care help 1. Salvage agency 2. Healing and rehabilitation institutions 3. Health care institutions
	Ccommunity service	Community service
Municipality management services	1. Concentrated home care 2. Institutional care for Alzheimer's patients 3. Basic daily care of the community	1. Night care 2. Concentrated home care 3. Institutional care for Alzheimer's patients 4. Community-specific groups focus on daily care

Long-term care insurance institutions usually divide the nursing needs into two categories, in need of support and in need of care. The nursing needs are divided into five levels according to the degree of nursing needs (table 3). There are two types of payment types: physical payment and cash payment.

Table 3 Monthly payment limit for nursing insurance (unit: Japanese yen)

Nursing level	Home care services	Facility care services
In need of support	61500	
Nursing level 1	165800	250260
Nursing level 2	194800	264390
Nursing level 3	267500	27822
Nursing level 4	306000	292380
Nursing level 5	358300	306210

Cash payment only accounts for a small proportion, such as the purchase of medical rehabilitation equipment. From the perspective of service location classification, Japanese long-term care services are divided into three categories: home care, community care and institutional care. The home service uses the home of the elderly as a place of care, providing services such as care, short-term attendance, and daily living assistance; community service provides the community as a carrier of care services, and provides concentrated care for different types of groups; institutional services are divided into welfare institutions, health institutions and infirmary institutions. The level of insurance coverage for an insured person is usually based on the care level of the insured. The insurance payment corresponding to each nursing level is shown in Table 3. As can be seen from Table 3, the higher the nursing level of the nursing object, the more the corresponding nursing service items are paid. The maximum level of payment for home care services such as “in need of support” is only 6,500 yen/month, while the upper limit of the «care level five» is as high as 358,300 yen/month, which is almost 6 times the upper limit of the «need to support» payment level [6].

Nursing needs assessment and nursing programming. In order to obtain the nursing services provided by the long-term care insurance plan, the insured must undergo a series of prudent and detailed needs assessment to determine the required nursing level and formulate corresponding nursing programs. The formulation of nursing plan is an important link after the assessment of nursing needs. The care plan is mainly developed by the care manager, the applicant and their family members. Although the act gives the insured the right to choose their own service projects, they are often difficult to determine the optimal care service plan due to their limited professional knowledge. Therefore, municipality regulations nursing insurance institutions must appoint a professional, qualified nursing manager to assist and guide applicants to develop and select appropriate nursing service programs, and assist in the implementation, testing and evaluation of nursing programs. Most of the nursing managers are members of the nursing

organization. The insured and their families have the right to choose the nursing manager freely. When they are not satisfied with the nursing manager, they can apply for replacement. In order to ensure the efficiency of nursing services, municipality requires nursing organizations to ensure that at least one nursing manager is required for every 50 patients [7].

Financing mechanism. Japanese long-term care insurance is a compulsory insurance, and the insured must participate regardless of whether they have long-term care needs. Japanese long-term insurance system adopts the pay-as-you-go system. The premium comes from the insurance premium and public tax collected from the current insured. As a whole, the insurance premium paid by the first insured accounts for 17% of the long-term care insurance premium; Insurance premiums paid by the second insured accounted for 33% of the long-term care insurance expenses; the central government is responsible for 25%; the prefectures and counties are responsible for 12.5%; the municipalities are responsible for 12.5%. The insured person enjoys long-term care insurance service, 90% of the nursing expenses are borne by the long-term care insurance, and the insured person bears 10% of the care [8].

3. Future reform of Japan's long-term care insurance

Since the official promulgation of the law on introduction and protection of insurance in 2000, Japan has revised the law five times in 2005, 2008, 2011, 2014 and 2017 for the problems encountered in the actual operation of the act. To sum up, the reform focuses on the following aspects: first, the long-term care insurance fund should be increased in revenue and reduced in expenditure; second, the long-term care hardware and software facilities should be improved.

From the central to the local: regionalization of government care responsibilities. The regionalization of government nursing responsibility means that the government's administrative management mode has shifted from centralized centralization to local decentralization, gradually reducing state intervention, reducing the authority of the central government, and gradually improving the authority, responsibility and fiscal revenue and expenditure of local governments. Enhance the flexibility and relevance of the care insurance policy. The Act stipulates that Japan's municipalities are the most important insurers, they should set different implementation policies (such as setting different insurance rates) according to the number of elderly people who need long-term care services, residents' attitudes towards formal and informal care, family residence structure, etc. The localization of government care responsibility will undoubtedly bring certain financial burden and heavy work burden to local governments, but it will facilitate the smooth development of nursing insurance, because local governments have the appropriate power to formulate long-term care insurance policy content suitable for local areas.

From government to market: the marketization of the main body of nursing service. The essence of the marketization of nursing service supply is that the supply of nursing services has shifted from «administrative intervention» to «market contract», which aims to use the power of the market to provide higher

quality nursing services for the elderly. In order to achieve this goal, Japan gradually liberalized its control, expanded the supply of nursing services, and realized the privatization of business operations.

Before the implementation of the long-term care insurance system, the government prohibits the general for-profit groups from operating or entrusting non-profit groups to operate elderly and disabled group care services. After the nursing insurance system began to turn to «contract» nursing service, it was stipulated that the nursing service providers included not only the public local autonomous groups, the public private social welfare legal persons, the non-governmental non-profit organizations (NPO), but also the non-governmental for-profit organizations legal persons. Private enterprises have been allowed to enter the geriatric care service market, and the number of providers of geriatric care services has greatly increased.

From family to society: Socialization of the subject of nursing service responsibility. The main body of nursing service refers to the responsibility from the previous family-only responsibility to the social responsibility. The basic purpose is to reduce the burden of care for the family, especially for women. The socialization of nursing disperses the risk of aged care, effectively relieves the burden of care for the family, so it is well received by the majority. A survey of 11,181 long-term care insurance users conducted by the ministry of health and the ministry of labor and welfare showed that the vast majority (86%) of users were satisfied or very satisfied with the care provided by the insurance plan. According to another survey, 42% and 52% of respondents believe that the level of charges and insurance fees for nursing services set by the government is appropriate. The family members of nursing service users also hold a positive attitude towards the evaluation of the plan, and 37% of the interviewed family members think that the long-term care insurance plan has reduced their burden of care [9].

4. The enlightenment of Japan's long-term care insurance policy for China. At present, in the context of «getting old before getting rich», it is necessary to learn from the beneficial experience of Japan's long-term care policy and actively respond to the growing demand for long-term care insurance.

Create long-term care insurance, uphold the top-level design, and gradually create the concept. From the practice of Japanese policy, it is found that long-term care insurance is separated from the medical security of the elderly. Therefore, the design of China's future long-term care protection policy cannot be placed in medical insurance, and it cannot be included in social assistance because of the huge long-term care spending will undoubtedly drag health insurance and social assistance. Drawing on the practice of Japanese policy, considering that social insurance is the direction of the future development of China's social security, it can directly establish an independent long term care insurance policy to make up for institutional loopholes. Long-term care insurance will be combined with pension insurance, medical insurance, unemployment insurance, and industrial injury insurance to form a social insurance system in China. In order to promote the construction of the long-term care insurance policy, it is necessary

to uphold the value concept of top-level design and gradual progress. The top-level design is to abandon the partial reform concept of «stop-gap measures» in the past social security reforms. The establishment of long-term care insurance policy in China should be written into law, and we should adhere to the concept of top-level design. We should not only avoid the «fragmentation» of system design, but also ensure the coordination and unification of long-term care insurance project, endowment insurance, medical insurance and other projects. Systematically is an inevitable choice for the gap between urban and rural areas, regions and groups in China. It requires that when designing the nursing care system, it is necessary to promote the system construction according to the needs of different groups for the demand for nursing services, in different categories, in stages and in a focused manner. For example, priority should be given to the care needs of families who are single, single-child, and low-income.

Accelerate the long-term care insurance legislation process to fill the gaps in China's long-term care laws. Legislation is the necessary guarantee to maintain the smooth implementation of any social policy. Japan's «Old Age Welfare Law», «Geriatric Care Law» and «Nursing Insurance Law» not only created a good legal atmosphere for the healthy operation of the Japanese nursing insurance system, but also guaranteed the authority and stability of the system from the height of the law. At present, although China has enacted the law on the protection of the rights and interests of the elderly, the social security law and other laws related to the protection of the rights and interests of the elderly, it is still unable to fully deal with the increasingly complex elderly problems in the aging society. In the new situation, in order to meet more and more nursing needs of the elderly, it is urgent to formulate special legislation for elderly care, such as «elderly care law», «long-term care insurance law», etc., to fill the gaps in elderly care laws and regulations.

Construct a multi-level nursing care system to realize the socialization of nursing services. In our country, the family is still the main body of nursing services. However, under the constraints of the core of family structure and the rising dependency ratio of the elderly, the nursing function of the family has gradually deteriorated, and the socialization of nursing services has become the trend of the times. Combined with China's national conditions and Japanese experience, China needs to build a multi-level nursing security system.

Set up diversified and humanized geriatric care programs to ensure the health and aging of the elderly. From the perspective of life cycle theory, most people will receive nursing services in their old age, which is an important stage in their life course. Healthy aging is not only the desire of every senior citizen, but also the pursuit of the senile nursing system. The establishment of a diverse and humanized elderly long-term care program is a prerequisite for the healthy and aging elderly people. However, the reality is that China's long-term care services have a single content and low level, which is often limited to the lower levels of service recipients such as warm clothes, adequate food and accommodation, ignoring the spiritual needs of the elderly, the lack of hospice care for the elderly and other projects. In fact, long-term care has a

deeper meaning, which is to promote the physical and mental functions of service recipients to reach the best state through a series of comprehensive services. These services are quite rich, mainly including treatment, rehabilitation, medical care, spiritual comfort and so on. We can learn from the Japanese nursing programs, and strive to achieve the diversification, refinement and humanization of nursing programs. In short, modern long-term care is an aid system that helps the elderly to stand on their own two feet. It includes a wealth of care programs aimed at enabling all elderly people to live a decent and dignified life [10].

Cultivate professional nursing talents and improve the overall level of nursing services. The gap of elderly nursing talents in China is relatively large, and the professional quality of nursing staff is relatively low, which cannot meet the needs of aged care [11]. At present, the government should attach great importance to the development and cultivation of nursing human resources, formulate medium and long-term plans for talent training, and ensure the quality and quantity of nursing talents. In terms of professional nursing personnel training, we can set up the geriatric nursing major in colleges and universities, set up geriatrics, nursing and other related courses, establish and cultivate a comprehensive quality geriatric nursing personnel who know geriatric medical care, geriatric social work, geriatric nursing and other aspects of knowledge. At the same time to strengthen the existing nursing practitioners on – the – job vocational training.

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CONSEQUENCES OF STATE INTERPRETATION IN AGRICULTURAL PRODUCTION AND TASKS OF ANALYSIS OF AGRARIAN POLICY

Yarmila Tkal,
Candidate of Economics Sciences, Associate Professor
Sumy National Agrarian University, Sumy, Ukraine

The domestic agrarian sector is characterized by insecurity and inability to function independently in market competitive conditions. This is characterized by such facts as a decline in production, a high degree of depreciation of fixed assets, a decrease in the profitability of agricultural production, impoverishment of the rural population. Agriculture most needs a sound justification for further prospects for the formation of a mechanism for state regulation of the agricultural sector of the economy. It is the state that should protect the domestic producer from price dictates of monopolies, technological backwardness of industries. Effective government regulation of the industry is necessary to overcome the crisis and to ensure the further intensive development of the agar sector of the economy.

Questions of the theory and modern practice of state intervention in agricultural production are devoted to the works of domestic scientists such as G. Andrusenko, V. Aranchiy, S. Braginsky, V. Grinyova, A. Dibrova, O. Zhemoida, Z. Zologa, O. Zorya, M. Koretsky, Y. Lupenko, M. Malik, O. Mogylny, I. Mikhasyuk, D. Mishchenko, A. Melnyk, M. Novikov, A. Pisotsky, D. Plekhanov, O. Romanets, P. Sabluk, O. Skidan, M. Fedorov and others. However, this topic is quite relevant and needs constant research.

Purpose of the study is to identify the main consequences of state intervention in agricultural production, to determine the tasks of analysis of agricultural policy of Ukraine.

The state is obliged to make preliminary examination of projects of construction of new enterprises for their environmental safety; prohibit productive activities that harm human health; to oblige entrepreneurs to direct capital restoration of the destroyed natural environment, to take measures to actively support small and medium-sized businesses that prohibit monopoly. With the help of market production alone, deep structural changes in production, strategic breakthroughs in the field of science and technology, organization of money circulation, defense, public order, energy system, solution of international and interstate problems are impossible. These and many other functions are assumed by the state, thus proving the need for its intervention in a market economy. There are three global functions of the state: efficiency, justice and stability [8]. Their characteristics are shown in Fig. 1.

The agrarian economy requires an optimal combination of state regulation and market leverage. Therefore, there is a need to develop theory and improve the practice of state influence on macro and microeconomic processes in the agrarian sector of the economy and related industries.

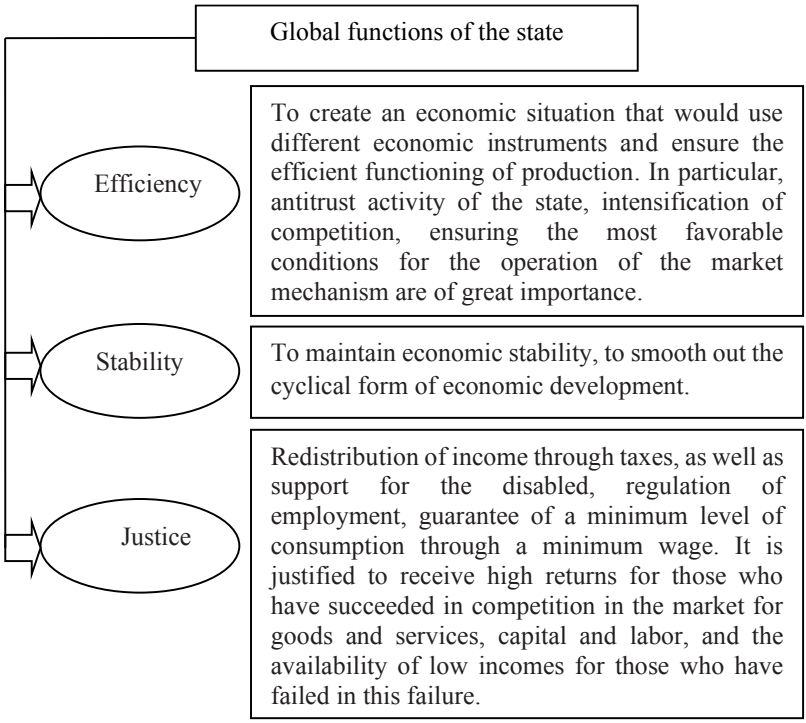

Fig. 1. Functions of the state

In our opinion, in the development of economy the state is called to correct those deficiencies that are inherent in the market mechanism. The market does not promote the rational use of depleted resources, the protection of the environment, it cannot regulate the use of resources belonging to all mankind. The market plays a decisive role in balancing the economy, but it does not guarantee the realization of socio-economic human rights to a decent existence, regardless of the forms and results of economic activity.

In the agricultural sector, compared to other sectors of the national economy, the process of production regulation is significantly complicated by the need to combine in agrarian enterprises several commodity industries, which are significantly different in organization and production process, the dispersion of production in a relatively large territory, which complicates the process of making operational management, dependence of production efficiency on natural and climatic conditions and seasonality of production [1].

These reasons and the negative consequences of the transformation of agrarian relations, the need to protect national interests in the world market make the need for state intervention in the development and increase of efficiency of

agricultural production. In Fig. 2 presents the methods of regulating the formation and development of agro-industrial complex and regional markets.

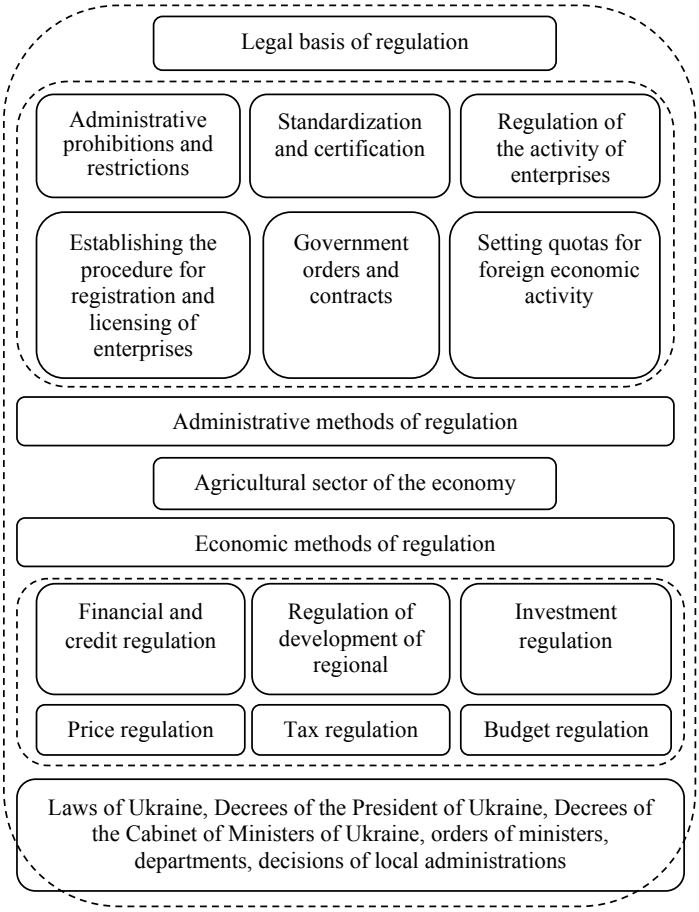

Fig. 2. Methods of regulation and development of the agricultural sector

Stimulating the development of agricultural production should be carried out by state support methods, in particular, price regulation, measures to reduce tax pressure, creating favorable conditions for crediting production, financial and investment support, debt restructuring in agriculture.

The situation in the agrarian sector indicates the need to create an effective mechanism of economic regulation. The optimal combination of state regulation of the economy with market regulators should ensure the exit of the agricultural sector from the crisis, make it possible to achieve high efficiency of agricultural production and competitiveness of domestic products in the international market.

Prospects for development of domestic agrarian production and market depend on the effectiveness of influence of the respective mechanisms on them. These mechanisms are still being formed, remaining largely imperfect, in a way that is not in line with the interests of market participants and is directly dependent on the existing conditions of their functioning. Mechanisms of regulation of agricultural production include structural components, which are appropriate to be divided into legal and economic (Fig. 3).

In market conditions, protectionism in the development of relevant industries and industries through the instruments of legal and economic mechanisms becomes a priority for improving the mechanism of regulation of agricultural production. This trend allows evolutionary ways to provide competitive opportunities for agricultural enterprises to produce competitive products. In order to achieve this, existing and new instruments for the implementation of protectionist measures should be improved and created, which will create the preconditions for the implementation of the functions of agrarian protectionism in terms of ensuring the high level of profitability of agricultural enterprises necessary for the development of the investment climate and the demand for innovators in the field of innovation.

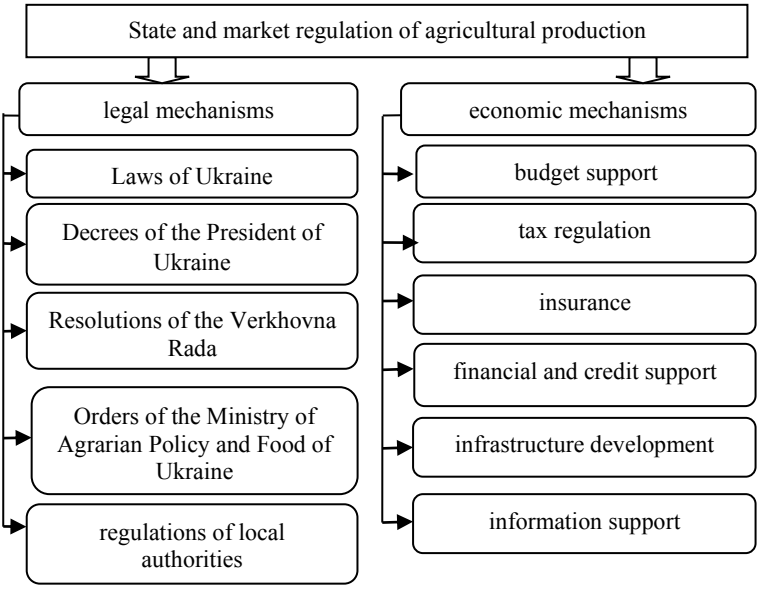

Fig. 3. Components of the mechanism of regulation of agricultural production

It is advisable to divide the measures of the state regulation of the agricultural sector into two groups: aimed at increasing the profitability, profitability of agricultural production (related to increased incomes of rural producers; in turn, can be divided into subgroups depending on how they are achieved. On the one hand, to increase the income of rural producers, it is possible to increase sales

revenue by increasing prices. On the other hand, it is possible to reduce production costs); free measures related to rural development (direct free assistance to rural producers, development of non-agricultural employment in rural areas, rural development measures include various regional programs: village gasification, electricity and water supply, development of socio-cultural sphere of the village).

The enforcement of state regulation instruments is possible through the creation of state and commercial structures of the national and regional levels, as well as state programs, called "the mechanism of state regulation of the agricultural sector of the economy". Its main directions include: the formation and functioning of the market of agricultural products, raw materials and food; financing, crediting, insurance, preferential taxation; protection of interests of domestic producers in carrying out foreign economic activity; development of science and implementation of scientific activity in the field of agro-industrial production; development of the social sphere of the village [4].

The state is trying to create all the necessary conditions for the normal functioning of the agricultural sector. How well these steps will be justified will take time, but it remains to be hoped for a gradual solution to all the accumulated problems of the complex.

The main tasks of state regulation of the agricultural sector of the economy are: ensuring the economic growth of the industry, which determines the progress of the national economy of the state or region, and provides for increased production of agricultural products, improving productivity in the industry, as well as forming a rational structure of demand and product range; ensuring the sustainability of agricultural production through the stability of market prices, the prevention and containment of hyperinflation, maintaining a certain level of employment of the rural population, ensuring the balance of income and expenditure in the agricultural budget and foreign trade, prevention of large budget deficits, foreign trade or foreign trade or negative trade products; ensuring economic justice in agricultural development. In the ordinary sense, this means a fair distribution of public agrarian wealth, but as one of the economic functions of the state, economic justice is also a fair distribution of industry income among members of society, giving equal opportunities in the agrarian market, fair market competition and so on.

The fulfillment of these tasks largely depends on the implementation of the functions of the state. The functions of the state are determined by the laws of the economic system and act as its effective means. The main regulatory functions of the state in a market economy, which are considered in the economic literature are regulatory, stimulating and distributive. The regulatory function of the state is realized in the formation of the legal foundations for the development of a market economy. The essence of the stimulus function is to stimulate economic growth and maintain market equilibrium. The distribution function is linked, on the one hand, to achieving a fairer distribution of income in society and, on the other, to a more efficient allocation of resources in a market economy.

In our opinion, it is advisable to narrow down the list of functions of state regulation of the agrarian sphere in order to clearly coordinate them and aim at achieving a specific task. Among them, economic, social, environmental, innovation and information are the main ones.

The economic function is to fulfill the basic tasks of the agricultural sector in order to provide the conditions for the functioning of the whole economy. It includes the production of agricultural products to meet the needs of the population and ensure the food security of the state, the use of production resources of other industries and participation in the development of inter-sectoral links, the functioning of agricultural markets, the creation of financial flows, attracting and utilizing investments and more.

The social function of the agricultural sector of the economy is related to the living conditions of the rural population, the creation of social infrastructure. This function has been reflected in the concept of sustainable rural development, which has become particularly popular in recent years.

The ecological function is realized in the use in the agricultural production of land, water resources, objects of flora and fauna. Given the dependence of agriculture on the impact of natural climatic conditions and on the quality of natural resources, its main task is to ensure optimal ecological balance in rural areas, as well as the conservation and development of agro-landscape as a basis for ector ism.

The innovative feature reflects the needs and opportunities to take advantage of scientific and technological advances, including genetic engineering, biological and pest control, and other biotechnologies that affect product quality.

The information function is characterized by the fact that the fulfillment of all the above functions is possible only in the presence of clear management decisions, which must take into account the peculiarities and specifics of agriculture.

Thus, in our opinion, the multifunctional agrarian sphere is a branch of the national economy, the effective development and functioning of which is ensured through economic, social, ecological, innovative and information functions, and its competitiveness is the main driving force for strengthening strategic positions and internal priorities markets.

Thus, the modern concept of state regulation of the agrarian sector of the economy should, first of all, proceed from the fact that in a democratic society the primary source of power is the people who delegate their powers to the bodies of legislative, executive and judicial power. In our opinion, social values are taken into account when substantiating the concept of state regulation of agrarian sphere. Many possible social values can be enumerated, but those that are directly relevant to the assessment of agricultural development include: economic efficiency, social stability, fair distribution of resources and income.

Economic regulation of agrarian production should be carried out within the framework of agrarian policy of the state through the application of price, credit-investment and tax mechanisms in order to form efficient production of agricultural products.

State support and stimulation in the agricultural sector of an efficient market environment should be complex and combine the following levers of economic regulation: price policy, tax benefits, guarantees for attracting investments, financial and credit support, promotion of insurance, customs and tariff regulation, budget support.

Economic regulation of the development of agricultural production should combine two areas: improving the economic efficiency of agricultural production through the development of market infrastructure, information and scientific and methodological support of economic entities, providing indicative regulation, ensuring social protection of the population and rural development; target regulation of constituents of the agrarian sector of the region to be implemented by facilitating the development of integration processes along the chain "production – processing – realization"; support of specialization and concentration of production and processing of agricultural products; implementation of new quality standards for both products and performance of agricultural enterprises, as well as monitoring compliance with these standards; implementing a policy of intervention for long-term storage products with the aim of smoothing out seasonal fluctuations in the agricultural market.

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PROSPECTS FOR THE DEVELOPMENT OF AGRICULTURAL POLICY IN THE FIELD OF GRAIN EXPORT

Olena Slavkova, Doctor of Economic Sciences, Professor
Sumy National Agricultural University, Sumy, Ukraine
Maryna Solovey, PhD student
Sumy National Agricultural University, Sumy, Ukraine

Development of agricultural sector is likely to have a powerful impact on the economic dynamics of Ukraine, given the significant prospects for its capitalization and projected long-term uptrend on the markets of major agricultural products.

The national economy of Ukraine, which basic component is agriculture, is the backbone of the domestic economy and forms the foundations for preserving the sovereignty of the state – food and to a limited extent economic, environmental and energy security ensures the development of technology-related sectors of the national economy and creates social and economic foundations for rural development.

Ukrainian agricultural sector with the potential production that significantly exceeds domestic market demand may contribute to the development of the national economy and its effective integration into the global economy and, therefore, increase income of the rural population involved in agrarian economy, the number of which is more than a third of the country total population, and ensure a multiplier effect for the development of other branches of the national economy [1]. The directions of development of the agrarian sector of Ukraine are to improve the state support to small and medium-sized farms, provide targeted loans to agricultural producers, improve the system of state governance in the agrarian sector, attract foreign direct investment, improve trade conditions with the EU, and expand exports of grain and livestock products to external markets.

Under conditions of openness of national economy global trends of food shortages growth and rise in prices can be considered as a powerful challenge for Ukrainian agricultural production. These trends will encourage the inflow of investment resources to the sector, can act as an incentive to active revival of agricultural production and agricultural exports, a source of additional financial resources for the development and capitalization of the sector, the basis to unleash the domestic agricultural potential as an important and still insufficiently disclosed national competitive advantage. Ukraine is now the third largest supplier of agricultural produce to the European Union and the world's largest grain exporter. With trade volumes experiencing active growth and investment flowing into the Ukrainian agribusiness sector, the country will play an increasingly major role in global food security. Grains will likely remain one of the pillars of Ukraine's agricultural export industry [1].

The development of the modern world is pursuing an evolutionary path of liberalization and globalization of the economy; it is an objective and irreversible

process. Location Ukraine is such that it is close both to the European Union (EU) and the countries of the Customs Union. Ukraine is a transit country between East and West. Currently in Ukraine there is a problem of definition of the integration strategy of development.

Ukraine started the way of EU associated member in one of the most difficult periods in its history. In order to overcome the systemic crisis, consolidate the country, oppose the external aggression and overcome its consequences it is more important than ever to maximize the positive effect on the path towards European integration for the development of Ukrainian society in general and the agricultural sector in particular.

Ukraine's European choice should be the basis for national solidarity based on the idea of country modernization. Restoring guarantees of their constitutional rights in full to all, without exception, citizens of Ukraine is the first very serious examination for Ukraine as an associate member of the EU.

Analysis of recent research and publications. Significant contribution to the study of the problems of Ukraine – EU relations, the issue of economic development of agriculture under conditions of globalization processes and analysis of problems of EU integration of Ukraine, including the special needs of agriculture was made by such foreign and domestic scholars as V. Kopiika, N. Antoniuk, N. Musys, D. Daynen, O. Kraievska, Y. Hubeni, W. Vardovskyy, P. Haidutsky, P. Sabluk, O. Shubravska, G. Cherevko, V. Yurchishin. The obtained results allow them to form a system of knowledge on European integration prospect of the domestic agricultural sector.

The aims of the article are to identify the prospects for the development of Ukrainian agriculture in the globalization process and assess their impact on the development of export of major agricultural products and attracting investments.

Development of integration at the European level is a sign of modern progressive changes in agriculture and the relatively new research area of national agricultural science. European guidelines provide agricultural sector the corresponding vector of development and open new opportunities for the revival of agriculture, create additional competitive advantage in the food market in the globalized economy. A major step from the perspective of deepening trade relations between Ukraine and the EU should be Free Trade Area Agreement (FTA), which will assist in bringing the domestic agricultural sector into compliance with European standards, its adaptation to the EU Common Agricultural Policy and expansion of new EU member states presence in the Ukrainian agro-food market.

According to the State Statistics Committee, in 2018 an increase of foreign investments in the Ukrainian economy amounted to USD 685.5 million of direct investments (equity capital). The investments are directed towards already developed areas of economic activity. In 2018, the share of implemented capital investments in agriculture, forestry and fishery was 12.5%. 98.5% of capital investments in the agricultural sector of the state economy were directed to the development of agriculture and provision of related services. Investment in forestry increased by 38.5% and in fisheries by 5.4% [2].

Analyzing the data in the table, it can be concluded that in 2018, compared to 2010, the total amount of direct equity and debt investments decreased by about 10 percent. Considering such sectors as agriculture, the decrease was by 13.5 percent (table 1).

Table 1. Selected indicators of Foreign Direct Investments in the Ukrainian Economy (in Million USD)

Indicator	2010	2018	Deviation 2018 to 2010, %
Direct equity and debt investments Total	44257,5	40020,9	-9,57
Of which in agriculture, forestry and fisheries	669.2	578.6	-13,54
Share in total, %	1,51	1,45	-3,97

Souce: Calculated according to data Direct Investment (Equity) (2010-2018) [3].

The negative fact is that agricultural sector is not a priority for investment, as evidenced by the fact that agricultural investments make up only 1.5 percent in total direct equity and debt investments. Decline of investment activities in agriculture could have a negative impact on the country's economy [4].

Foreign direct investment in Ukraine increased by USD 578.0 million in the second quarter of 2019. In the second quarter of 2019, the capital investment in agriculture amounted to USD 933.4 million, that is only 86.8% compared to the corresponding period of 2018. At the same time, while the total investment in the country increased by 7.5%, the share of agriculture on the contrary decreased from 12.8% to 10.0%. Compared to the previous year, the growth rate of capital investment in the agricultural sector of the economy has slowed significantly. The share of agricultural production in investments also decreased (-2.4%).

On the other hand, capital investments in food production over six months of 2019 increased by 52.7% compared to the corresponding period of 2018. In terms of capital investment, which in fact does not exceed USD 110 per 1 ha of land, Ukraine is significantly inferior to the developed countries. There, this figure is at least USD 150 per 1 ha. [5].

The volume of investments in regional economies increased. Positive dynamics of foreign direct investments growth was observed in 17 regions of Ukraine. [nn] Top 5 regions by the volume of investment in agriculture, forestry and fisheries in 2019 are Kyiv region, Cherkasy region, Poltava region, Chernihiv region and Vinnytsia region. Agriculture of Kyiv region remains the most attractive for foreign investors. The share of these regions in the total amount of investments into agricultural sector is 40.2%, of which Kiev region attracted 3.1%, Cherkasy region 6.9%, Poltava region 6.9%, Chernihiv region 6.8% and Vinnytsia region 6.5%.

Farmers of Ternopil region attracted 6.4% of foreign investment, Sumy region 4.9%, Kirovohrad region 4.8%, Khmelnytskyi region 4.6%, and Kharkiv

region 4.4%. The remaining regions account for about 34% of foreign investment. Reduction in FDI volume was observed in 8 regions, most of them in Kherson (-6.6%), Dnipropetrovsk (-3.0%) and Ivano-Frankivsk (-1.1%) regions [6].

The key investors in the economy of Ukraine include Cyprus with the share of 27.5%, the Netherlands – 21.9%, the Great Britain – 6.1%, Germany – 5.2%, Austria – 3.1%, the Virgin Islands (British) – 4.1%, and Switzerland – 4.8%. According to the State Statistics Service of Ukraine, most of the direct investment in the agrarian sector of Ukraine comes from Cyprus, the British Virgin Islands, Germany, Denmark and Poland. In 2018, Cyprus directed USD 137.5 million into agriculture of Ukraine, the British Virgin Islands invested USD 85.2 million, investment share of Germany accounts for about USD 80.7 million, Denmark and Poland invested USD 53.3 million and USD 31 million respectively. Ukrainian farmers received the least investment from Lithuania (USD 33.0 thousand), Luxembourg (USD 65.0 thousand) and Belarus (USD 70.6 thousand).

The total share capital of agriculture, forestry and fisheries of Ukraine amounted to USD 560.9 million, that is, since 2017 it has decreased by 3%. This was due to the decline in the livestock sector, where investment decreased by 6.2% to USD 62.7 million. More than half of the investment (56%) is directed to the arable sector, mainly to the cultivation of annual and biennial crops. Direct investment in the cultivation of annual crops grew by 0.5% to USD 297.3 million and perennials by 5.2% to USD 20.5 million [7].

It should be noted that in the structure of foreign investment the EU remains the main investor in the Ukrainian economy. Therefore, the integration of our country into the EU is a significant step forward, which has both positive changes and serious challenges, among them – the need to ensure national interest in the field of food security and competitiveness of domestic producers.

The state agrarian policy of Ukraine is aimed at creating a favorable investment environment, as evidenced by regulatory documents adopted by the state for execution. Fundamental in this direction is the Strategy for the promotion of private investment in agriculture for the period up to 2023, which was approved by the Decree of the Cabinet of Ministers of Ukraine dated July 5, 2019, No. 595-p. [8].

The purpose of this strategy is to improve the organizational, economic and legal conditions to facilitate the attraction of private investment in agriculture, which will increase the export of agricultural products, ensure national food security and sustainable cost-effective and environmentally balanced growth of the agricultural sector. This regulatory document identifies major challenges (obstacles) to creating favorable conditions for attracting private investment in agriculture, namely:

– structural constraints, such as imperfect market infrastructure, anti-competitive market environment;

– complicated procedure for distribution and receipt of state support funds;

– local monopoly on the nitrogen fertilizer market, which leads to market inefficiencies, increases fertilizer costs for producers and impedes innovation;

– unfinished land reform;

– difficult access of agricultural producers to financial instruments;

– imperfect transport logistics, in particular with regard to transportation of agricultural products;

– sanitary and phytosanitary barriers;

– land and soil degradation, unbalanced use of natural resources, climate change and extreme weather events (droughts, etc.).

The implementation of this strategy will ensure:

– medium-term planning in agriculture;

– an increase in the number of registered fertilizers and pesticides available for use by agricultural producers;

– increase of extraction (catch) of aquatic bioresources;

– comprehensive entry of information on state-owned land plots into the State Land Cadastre;

– authorizing state registrars of real property titles to real-time access to information on court decisions, arrests and other encumbrances, cadastral numbers, land owners;

– reducing the cost of products grown on irrigated lands;

– reducing the cost of transportation of agricultural products;

– increase in private investment and business activity in agriculture, improved access of agricultural producers to financial instruments;

– increasing employment and income levels in rural areas. [8].

Foreign trade plays an important role in the Ukrainian economy. In 2018 there was an increase in exports, including agricultural products. Ukraine shipped USD 47.4 billion worth of products around the globe in 2018. That figure represents roughly 0.3% of overall global exports estimated at USD 17.546 trillion as of February 9, 2019. Exports of goods from Ukraine in the first quarter of 2019 grew by 7.4%, compared to the same period of 2018, and amounted to USD 12.3 billion. Ukraine exported agricultural produce worth USD 8.97 billion in the January-May 2019 period, representing a year-on-year increase of USD 1.58 billion or 21.4%. Foodstuffs accounted for 42.9% of overall Ukrainian exports, making the sector a key source of foreign currency earnings for the Ukrainian economy as a whole.

According to data from the State Statistics Service of Ukraine, the European Union market is number one market for Ukrainian exporters. Its share in total exports amounted to 42.7%. The agricultural sector and metallurgy products are in the greatest demand in the commodity segment. Moreover, the growth of grain exports in the first quarter of 2019 was 52%.

The share of agricultural products in the structure of Ukraine's exports has increased from 27% in 2013 to 39.3% in 2018 and amounted to USD 18.6 billion. However, it should be noted that the basis of agricultural exports is still the export of raw materials, namely, products of plant origin – wheat, corn, barley and soybeans. The share of this product in the structure is about 55%.

The main market for Ukrainian agricultural products in 2019 remains Asia with the share of 44.6%, where the partner countries are China (8.9% of total agricultural exports worth USD 795 million), India, (8.3%, USD 741 million) and Turkey (7.6%, USD 684 million). In the second place are the EU countries, with a share of 33%, where the main partners are the Netherlands (7.1%, USD 641 million), Spain (USD 503 million), Italy (USD 333 million), Poland (USD 301 million) and Germany (USD 250 million). The third biggest trade partner is African countries, with a share of 14%. The main partners from Africa are Egypt (8.2%, USD 737 million), Tunisia and Morocco.

In recent years, Ukraine has been increasing imports from Poland, which is the first in the structure of agricultural food imports of Ukraine. In the first half of 2018, imports from that country amounted to USD 214.1 million. The second place takes Germany with USD 208.9 million, and the third place takes Turkey with USD 194 million. As a result of 2018, total exports of products from Ukraine amounted to USD 56.9 billion. At that time, agri-food imports were USD 5.1 billion [9, 10].

According to experts of the European orientation the implementation of the Free Trade Area Agreement between the EU and Ukraine, our country can gain considerable benefits in the field of agriculture, in particular due to:

– growth of Ukrainian agricultural products export in the EU;

– greater access to the markets of third countries by harmonization with EU standards;

– improvement of the investment climate as a result of adaptation of national legislation to the EU guidelines and regulations;

– abolition of subsidies on agricultural products export from the EU to Ukraine;

– gradual increase in quotas on exports of certain agricultural products from Ukraine to the EU.

Probable trials that Ukraine will undergo after EU accession:

– increased competition in the domestic market, especially in the short term due to the elimination of tariff and reduction of non-tariff barriers;

– restricted access of Ukrainian goods to European markets under the pretext of non-compliance with European standards and certificates;

– recall from the free trade regime of almost 400 commodity headings, mainly agricultural products, liberalization of exports of which to the EU markets would be most beneficial for Ukraine;

– introduction on the part of the EU discriminatory system of tariff quotas for Ukraine at a very low level (for most products these quotas are less than 6% of the EU market of these products (grain, meat, etc.));

– export duty suspensions on sunflower seeds that can leave domestic processing plants with no raw materials;

– preservation of the EU system of multi-billion subsidies of the agricultural sector, making export of Ukrainian products in the EU and in third countries uncompetitive [11].

In order to successfully meet the challenges of European integration agrarian sector of Ukraine has enough prerequisites: rich natural resources and export potential, significant human capital, gradually increasing investment attractiveness, preserved rural lifestyle pattern and centuries-old farming traditions. In this context, research and scientific understanding of the experience of the formation of the European agricultural model will promote structural reforms in the field of agriculture and improve the competitiveness of agricultural products in the European and global markets.

In addition there is now a need to improve the quality of information support in agriculture, which is due to the fact that the agreement with the EU requires significant adjustments of regulatory practices in Ukraine, in particular in the areas of competition, government aid, public procurement, application of sanitary and phytosanitary measures, technical regulations, intellectual property rights, sustainable development and others.

Enhancement of the process of legislation updating and improving in the sphere of agriculture state support should be conducted on the basis of Chapter 17, Section 5 of the above said Agreement on agriculture and rural development [12].

Detailed analysis of the key provisions of the Agreement shows that the main obstacles to agricultural producers in the future may be: increased competition in the domestic market of agricultural products, especially in the short term, restricted access of Ukrainian producers to European markets due to the non-compliance with quality food standards.

Therefore, in the present conditions it is currently important to ensure the competitiveness of domestic agricultural products by creating incentives for technological upgrading and modernization of agricultural production, including providing cooperatives with necessary machinery, equipment, introducing the system of congruence of economic interests in production, processing, trade, creating conditions for agricultural products deep processing, which is aimed at export, formation of effective agricultural market infrastructure.

In order to manage the economic processes in agricultural production management staff of the enterprise must obtain truthful and unbiased information on the activities of the company as well as the possibility of increasing profitability by selecting promising markets for marketable products.

The inevitable impact of globalization on the economy of our country is most noticeable in various sectors, including agriculture. In the market economy environment there is an increased demand of understanding of investment, capital maintenance, disposal, distribution and accession of property, definition of financial and economic activity of the enterprise and its long-term development strategy, tax and other situations.

Deepening cooperation with the EU, Ukraine will have new incentives for the development of the internal market and deepening economic specialization of the regions. Agricultural production with its renewed structure will be directed to domestic consumption. However, the improvement of foreign economic outlooks

of Ukrainian agriculture will be possible due to the transition to cultivation of more competitive plant species and more productive animal breeds, extension of the scope of application of advanced agricultural technologies, encouragement of modern and sustainable agricultural production, a prerequisite for which is the protection of the natural environment, the spread of organic production methods and the use of modern biotechnology.

Thus, in the current conditions it is necessary to rethink of the place of domestic agricultural producer in the process of globalization of Ukrainian economy and impact of European standards on the entrance of agricultural producers to the EU market. The current state of national agrarian sector indicates that the processes of globalization is likely not to open new opportunities for the Ukrainian economy, but also lead to deepening of its backwardness from developed countries. Therefore, an important task now is to determine the strategy of the government and private businesses to adapt to the new global economic environment.

Prospects for the use of the study results involve the definition on the basis of the given in the article prospects for the development of agriculture in Ukraine caused by globalization and assessment of their impact on the optimal organizational and legal forms of agricultural enterprises, which are able to operate with the greatest economic returns under the current conditions of development of global agriculture economy.

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MANAGEMENT THE PROCESS OF EFFICIENT USE OF NATURAL RESOURCES IN UKRAINE

Tkachenko Viktoriia Viktorivna
PhD, Senior Lecturer of Management Department
Sumy National Agrarian University

One of the most acute and complex problems today is the rational use reproduction and protection of natural resources from pollution, degradation and depletion.

In the process of socioeconomic development of the country there is a need to find new qualitative approaches to solving the problems of environmental protection and rational use of natural resources by agricultural enterprises, greening production, increasing soil fertility, reducing pollution of water and air resources, conservation and repair of forest resources.

The problems of rational use of natural resources are devoted to the works of L. Abalkin, A. Aksenenko, T. Ben, I. Buleev, B. Burkinsky, O. Vasylik, V. Golyan, R. Dubas, Y. Koval, V. Mishchenko, L. Melnyk, V. Stepanova, A. Turilo, A. Sheremet, M. Chumachenko, S. Kharychkova, M. Khvesik and others.

Reforming economic relations in the agricultural sector is impossible without the reproduction of natural resources which requires improving the regulatory legal support, economic tools and methods, information support to improve the efficiency of agricultural enterprises, taking into account environmental aspects.

The development of social relations and the improvement of tools have led to greater use of natural resources especially in agriculture. Fulfilling of human needs require the involvement of increasing amounts of natural resources in the production process accompanied by the irrational and exhausting use of them, increased rates of discharge of pollutants into the environment which has a negative impact on human life and health.

Use of natural resources in agricultural production is characterized by the development of productive forces, growth of their use especially of land and the rate of environmental pollution, the deterioration of the health of the working population and the decline in labor productivity.

Socio-economic growth is driven by the following indicators:

- increasing the volumes of natural resources in agricultural production without changing the efficiency of their use;
- increasing the volumes of natural resources in agricultural production with increasing the efficiency of their use;
- increasing the efficiency of natural resources use in agricultural production without increasing their volume.

A promising direction for economic growth is the third – intensive growth. The first direction – the classically extensive is the most exhausting for natural resources but today the second – the transitional one prevails.

It should be noted that the full transition to intensive development requires significant changes in the economic mechanism of the use of natural resources by

agricultural enterprises, the introduction of progressive relations on a competitive basis with due regard for nature.

The allocation of natural resources especially in agriculture «leads to their depletion; deterioration of the quality characteristics resulting from the operation. There is a decrease in land fertility, degradation and destruction of forests, disturbance of the regime of water systems and their pollution, transformation of relief» [1, p.50].

Inconsistency of economic development rates with environmental safety requirements, the priority of nature-based industries, the high proportion of resource- and energy-intensive obsolete technologies in agriculture, the raw materials orientation of exports, as well as the low level of ecological culture and consumption lead to the deepening of the crisis in the economy and environmental degradation.

«The modern type of environmental and economic development is defined as technogenic based on the use of artificial means of agricultural production created without taking into account economic restrictions» [1, p.135].

«The technocratic concept of national agriculture based on a quantitative increase in the technical, agrochemical factors of intensification of agricultural production on the use of industrial technologies and their maximum involvement in the use of natural resources has not provided an adequate increase in its effectiveness. This concept caused excessive negative anthropo-technogenic pressure on nature and undermined its restoration and self-regulating capabilities of the latter» [2, p.7].

At the same time «economic damage is caused which is a valuation of the degradation of natural resources and environmental pollution under the influence of anthropogenic factors. This type of development is aimed at combating the negative environmental consequences of economic development and not with the causes of their occurrence» [3, p.41].

One of the ways to overcome the environmental and economic crisis is to build such economic relations in society that contribute to changes in the structure of agricultural production through the introduction of resource-saving, low-waste, environmentally friendly technologies and the modernization of agricultural machinery.

The economic mechanism for the use of natural resources by agricultural enterprises is an effective way to regulate resource use in the agricultural sector the development of which is to compensate for losses from man-made natural disasters, to evaluate them; loss prevention; ensuring legal and economic protection of production activities; increased liability for increased risk.

In the opinion of Melnik L. «the economic mechanism is a set of economic structures, institutions, forms and methods of management with the help of which economic laws that are applicable in specific conditions are implemented and coordination and adjustment of public, group and private interests are carried out» [4, p.458].

Tarkhov P. under the economic mechanism of the use of natural resources understand the totality of forms and methods of regulation of agricultural production through the use of market-oriented administrative, economic and social management methods [5, p.78].

Golyan V. [6, p.6] considers the economic mechanism of the use of natural resources as «a set of forms, methods of regulating the use of natural resources and environmental protection».

Dubas R. [1, p.363] considers that the economic mechanism of the use of natural resources by agricultural enterprises is a set of interconnected methods and levers «oriented on the rationalizing of natural resources use and protecting the environment while expanding their use or focusing on stabilization and reduction use of natural goods».

We consider that the economic mechanism of the use of natural resources by agricultural enterprises is a system of interconnected tools and levers aimed at establishing the effective exploitation of natural resources taking into account their optimal use and reproduction.

Currently, the following types of economic mechanism of the use of natural resources by agricultural enterprises are emphasize:

- it is aimed at eliminating negative environmental consequences and not at the reasons for the occurrence of environmental changes which has little effect on the pace and scale of development of agricultural sectors almost without restraining their activities;
- stimulating the development of ecological balance sheets and environmental protection enterprises in the agricultural sector which helps to increase agricultural production based on new technologies and improves the use and protection of natural resources (for example the development of biological farming);
- does not contribute to the development of agricultural enterprises in the direction of expanding their natural base, anticipating the economical use of natural resources.

It should be noted that none of the types of economic mechanism for the use of natural resources by agricultural enterprises exists in its pure form.

We propose to highlight the following basic elements of the economic mechanism of the use of natural resources by agricultural enterprises:

- pricing taking into account the environmental factor;
- economic instruments for environmental protection;
- a system of financing environmental protection events;
- payment for the use of natural resources;
- environmental insurance;
- economic and environmental regulation.

For quite a long time in Ukraine existed the concept of «free» natural resources or their minimum price. It is in the absence of real prices for natural goods that the main problem of the use of natural resources lie, contributed to their irrational and ownerless use» [7, p.67].

Payments by enterprises to environmental funds do not fully contribute to the rational use of natural resources.

The components of the price of natural resources are the prices of raw materials, materials, energy; payments for the right to use the land, water, forest

and other natural resources; payments for the use of the assimilation the potential of ecosystems (for pollution) rent for the use of fixed assets, including environmental protection.

Most scientists are inclined to believe that the real prices of natural resources can become an effective lever in the market mechanism and back with the irrational use of natural resources at agricultural enterprises their accounting will lead to a deterioration in production indicators and will directly affect financial results.

Any operations for the purchase and sale of land associated with the establishment of a price for it which in turn depends on the fertility of the land as well as its location. So, the price of land does not depend on its value but on the income that land brings to its owner in the process of exploitation, that is, on rent which also serves as a combination chain with the economic assessment of the use of land resources [8, p.23].

An important role in the system of economic instruments of the use of natural resources by agricultural enterprises are played the tax policy which provides for the collection of payments for the right to use natural resources (for example, for the use of land resources for agricultural enterprises a fee is set in the form of land tax or rent); payments for the reproduction and protection of natural goods; compensation payments for the disposal of natural resources from their intended use or deterioration of their quality (for example, payments for the removal of agricultural land from circulation) payments for environmental pollution (emissions of pollutants into the atmosphere from stationary sources and vehicles, wastewater discharges into water bodies, waste disposal etc.).

One of the main taxes paid depending on the presence of the land payer is the payment for the land.

Payment for the land is a direct tax on the ownership or use of a land plot which is levied either in the form of land tax or rent. The rent is determined depending on the monetary value of 1 ha of a certain type of land.

Land taxpayers include both legal entities and individuals who own or use a land plot, including under lease terms. That is, land tax is a combined tax regarding its classification depending on the subjects of taxation.

The amount of payment for land is actually determined by the area of the land plot and the monetary value of 1 ha of the land plot and does not depend on the results of the payer's production and business activities. The calculation of the amount of land tax is based on the total tax for the current year as of January 1 of the next year.

The objective of the tax policy in the use of natural resources by agricultural enterprises is to reduce tax pressure on them, simplify tax accounting and increase its transparency and reliability, optimize the timing of tax payments and create favorable conditions for agricultural producers. Reducing tax pressure is most often realized by establishing tax benefits that should be provided taking into account the level of environmental protection measures and the greening of production activities. Reducing the tax rate should be applied to resource-saving and low-waste technologies. At an increased rate it is necessary to tax the activities of agricultural enterprises using harmful, ozone-depleting drugs, pesticides, energy-intensive equipment and the like.

«Green» (environmental) taxes are important. They allow to make the cost of agricultural products more adequate in relation to costs as well as contribute to the compensation of environmental damage by the polluter and not by the whole society (implementation of the principle «polluter pays»).

The modern tax system is aimed at collecting taxes on income, value-added, etc. Payment for the use of natural resources is a few percent of the revenue side of the budget, encouraging natural exploiting activities.

In our opinion, it is advisable to change the proportions in favor of increasing the share of taxes associated with the use of natural resources, primarily, fees for the right to use resources, green taxes.

We consider that the principle of paid use of natural resources should be implemented in the following areas:

- the introduction of fees for the acquisition of the ownership of a natural resource;
- payment of the use of natural resources, for the negative impact, the deterioration of its condition.

The measures to improve the economic mechanism of the use of natural resources by agricultural enterprises in the field of taxation should include:

- a reduction in the list of harmful substances for which payments are made and increase the standard fee for discharging harmful ones;
- to lay the basis for calculating pollution charges between the size of fees and the total costs of agricultural enterprises;
- not take into account the amount of payment for environmental pollution in the cost of production;
- introduce a procedure for collecting payments for limit and excess pollution of the environment directly from the profit of agricultural enterprises;
- introduce tax incentives by taking into account payments for pollution funds that were sent by the enterprise for environmental protection measures, the introduction of resource-saving and low-waste technologies.

The importance in the system of paid use of natural resources in agriculture should be given to fines, sanctions for the irrational use of natural resources by agricultural enterprises and environmental pollution. In case of land seizure due to its irrational use, air or water pollution in excess of the established standards, it is necessary to apply economic and legal levers to deal with violators. It is advisable to improve the system of penalties in case of violation of the conditions for the use of natural resources by enterprises.

The current economic mechanism does not create preconditions for full financing of current expenditures for rational use of natural resources by agricultural enterprises and their reproduction [9, p.369].

The effectiveness of financial support for running costs depends on the completeness and timeliness of payment of fees for environmental pollution as well as on the financial capacity of agricultural enterprises. Now for environmental pollution do not compensate for the economic damage to the full.

Compensation of damages provides the compensation of harm for environmental pollution to individual business entities, including the public. In this case, we are not talking about direct compensation for harm directly to the population but indirectly through compensation measures (construction of hospitals, etc.).

The funds that remained need to be directed to environmental programs of state and regional significance, the conservation and reproduction of natural resources, the creation of facilities for waste management, the development of new environmentally-friendly technologies. Then the circulation of these funds in the field of agricultural activity will be carried out.

The disadvantage of the system of financing environmental protection measures is that most of the investments come from the state budget and depend, as a rule, on the economic situation in the country and not on the needs of reproduction of natural resources.

To improve the situation, we propose left the public investments on environmental protection in the budget (to finance large-scale national and regional programs) and for the financing of current expenses – to form trust funds based on pollution charges, fines for violation of environmental laws.

An important role in the formation of an effective economic mechanism of the use of natural resources by agricultural enterprises belongs to the state. It is set the main directions, parameters and the procedure for their application, the priority of which are the protection and rational use of a specific type of natural resource by agricultural enterprises.

One of the most important tasks of implementing state policy is to ensure stable international relations with other countries in the economic sphere and to establish itself as a stable, developed power.

So, at the present stage in Ukrainian economy apply various types of the economic mechanism of natural resources use with varying degrees of their development. But it is advisable to develop an economic mechanism of the use of natural resources by agricultural enterprises. The components of its existing elements need to be improved: taxation, insurance, investment in innovative technologies and others.

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BASIC APPROACHES TO THE ASSESSMENT OF STATE SUPPORT OF THE AGRARIAN SECTOR

Yulia Abraham,
Ph.D., Associate Professor
Sumy National Agrarian University, Sumy, Ukraine

To assess the agrarian sector to new economic conditions, research on the evaluation of the results of state support plays an important role. There are a number of issues that are assessed across the various agrarian sectors, which are openly collected tools, methods and methods of regulatory regulation that know they have developed. They mentioned that it is necessary to pay attention to the research of modern units that meet the requirements of the agricultural sector of the economy. Agriculture uses very weak competition when it comes to nature – climate conditions, as well as differences from work.

Studies of the issues considered in the evaluation of excellence are highlighted in Komarova, I.V., Ambrosov, V.Y., Varchenko, O.M., Ostashko, T.O., Borodina, O.M., Heets, V.M. and others.

The protest unjustifiably resolves the issue of making sure that it was presented in all cases.

The research methodology is conducted in the analytical methods used and investigated.

A number of economic factors and the worldwide industry are seeking to see that most business enterprises use special data that is not used but is not a self-regulatory system that is known beforehand and is actively supported.

According to the results of the work, it may have been suggested to entrust various branches of agricultural enterprises, namely the budgetary ministry, as well as a large number of enterprises represented in the agricultural sector to the respective economy. But, using the current state of the economy in its world, it can be reinforced that it has to perform in the economy of the agro-industrial sector without maintaining competitiveness, and so far, there is the greatest number of economic results, and they do not need to exist for a crisis. So today, the question of the efficiency of agricultural producers, who offer their price, is an acute issue.

The total amount of agricultural policy in the national budget cannot be a significant feature of the sector concerned. In their practical experience, users are allowed to assess the level of regulation of the farm and the efficiency of the farmers. Currently, two methods have been used to reach the domestic agricultural sector of the country – the Organization for Economic Cooperation and Development (OECD) (well-known assessment and placement of national agricultural structures) and trade awareness (concerning control over the relevant WTO member countries) issues) uniform, which “creates” trade). The OECD has evaluated the effectiveness of the work in terms of recipients (producer, consumer or sector as a whole), and the WTO is a classification of internal space for “consumed” production and traded and maybe in

modern jobs, and this should be borne in mind that it is necessary to consider the inefficient use of resources and those that are not used in production and trade.

According to this criterion, all state support measures are conditionally divided into boxes: green, blue, yellow and red. The "green box" is supported by internal development that does not use agricultural production and trade, but also uses an undue ministry (funds for production of infrastructure, harvesting, environmental protection, research). Measures of the "blue box" are also not subject to reduction. These include programs that reduce agricultural output (up to 85% of the level) and check for fixed agricultural land or approvals themselves. The "yellow box" measures are the subject of budget cuts. These include: subsidies for the production of used animals, breeding production, elite production, compound feeds, compensation for people working on mineral fertilizers that exist and are used on energy resources, price support: compensation and procurement exists in the market target for agricultural production; own production of goods and services with lower market prices; purchase in production facilities (services) at market-creating prices; concessional lending to farmworkers for this budget; debt relief; benefits for transportation of agricultural products; actually leasing material. The maximum allowable level of growth is fulfilled as the average annual amount of actual actions at the Yellow Box events that took place in different cities. Minimum allowable support, which minimizes 5% of agricultural diversity for developing countries and 10% for developing countries [1]. To the "red box" significantly shift from export use. The WTO prohibits export subsidies, subject to those fixed in the review, which is country-related.

There are some series that take into account the real assessment of the level of regulation in the agrarian sector of the economy [1]. In that regard, it was the company that worked in the agrarian sector of the non-working economy. Note that the actual results were evaluated in principle, and this was done from them [2].

The first indicator is the equivalent of producer subsidy (ERU), which characterizes the magnitude of transfers from consumers of products and taxpayers to farmers. This indicator is in use and has divided total transmission by the gross profit-makers. This figure is found in the US.

The second indicator is the Aggregate Support Amount (ASA). This indicator is mainly used in the calculations of the WTO [3].

This indicator can be positive and negative. If the indicator is positive, the state pays direct or hidden subsidies to producers; if the indicator is negative, then producers are net taxpayers, or their financial condition is deteriorating as a result of government programs.

The estimate of the direct budgetary representative of agricultural producers can be used to use the calculated NAC producers (Nominal Assistance Coefficient). This indicator reflects the ratio of consumption of agricultural products at domestic prices to the volume of consumption at reference prices; the budget efficiency index, which is determined by dividing the amount of discounted budget cash flows by the amount of government support at the expense of budgetary funds.

Productive agricultural productivity is increasing at the level of the result but profitability. Mathematical statistics were used to show the effectiveness of use, using the method of correlation-regression research, which could estimate the factors that exist among others and may have been insufficient. However, the use of mathematical models to evaluate the effectiveness of state agricultural policy does not allow to obtain reliable results, since there is a simplification of economic relations, and therefore it is not appropriate to use this method.

It should be noted that there is a system of indicators for assessing state support for agriculture by the Organization for Economic Co-operation and Development (OECD). This system is in place to evaluate and analyze the implemented agricultural support policy. This system of state support evaluation exists in more than 40 countries and contains the results of the development and implementation of state support policy over more than 20 years. This metric also applies to non-OECD countries, such as Ukraine, Russia, Brazil, China, Chile and South Africa. The OECD units are used to study the manufacturing units. According to this methodology, there are indicators of agricultural support estimates based on the correlation between the world and domestic prices for agricultural products (consumer support indicators; producer support indicators; estimates of overall support for agriculture [4]).

The advantages of this methodology are that the indicators used to provide a quantitative assessment of the policies, and the relative indicators used to allow us to compare the policies of different countries.

The OECD annually publishes indicators for assessing the level of state support for agriculture for its member countries as well as for non-member countries.

Concerning the assessment of state support for agriculture in the WTO, this assessment aims to determine how domestic government policy changes the conditions for trade in agricultural and food products in the world market.

We use these methods to propose that you are represented by:

- those that apply world trade ("yellow box" measures);
- those not used in their trade (green box measures).

The activities of the "green box" include: state research programs; provision of infrastructure creation and maintenance services; marketing services and measures to promote the product to the market; teaching; consulting services; programs for the elimination of diseases and pests; compensation for damage caused by natural disaster; payments for environmental programs, etc.

Measures of "yellow basket" include reimbursement of interest on credit rates, reimbursement of the cost of purchased agricultural machinery, hectare payments, subsidies per 1 kg of live weight and more.

It should be noted that the yellow box support measures are estimated based on the calculation of the aggregate (aggregate) measurement of support (SVP or AMS)". This indicator reflects the annual level of support for specific agricultural products, or non-specific support for agricultural products only, expressed in monetary terms. This indicator does not take into account the amount of government support allocated to programs that are exempt from the obligation to reduce support.

Factors that take into account the most up-to-date demonstration: market prices that are viewed as products of various cynical manufacturers and are noted and valued; direct payments should be made to producers for the production of different agricultural entities that develop on a body that originates from different enterprises, and those that are not delayed and can develop on a budgetary basis; subsidies paid to producers that do not fall out of those people who are drafted and selected on the basis of budgets that should be [5].

Also in the framework of the World Trade Organization (WTO) apply the "blue box". These measures are aimed at avoiding overproduction through the use of fixed agricultural land, fixed livestock, for which there are no restrictions on public funding.

The added AMS figures do not include and do not require a reduction in the number of agricultural enterprises, but this item is within 5% of the publicly available basic agricultural enterprise and is in its service and is not specified for a specific type of commodity and is not. Greater, lower than 5% of probable agriculture [6].

About the agriculture of Ukraine, according to the WTO agreement, the total amount of its state support (AMS), which contains separate support programs from the "yellow basket", should not exceed 3 billion 43 million UAH.

Also, Ukraine may additionally spend up to 5% of its annual gross agricultural production annually on Yellow Basket support programs [7].

It should be noted that the OECD and the WTO when evaluating different sectors of the economy are separate, and those that exist in different regions have special features of activity.

The OECD annually monitors the agricultural policy of not only the member states of the organization but also of rapidly developing economies. Considering that the global market is congress and its main macroeconomic parameters are underperforming and utilizing the agricultural sector, we are seeking to explore the emerging trends of both members of the organization and the emerging industry.

Aggregate support for agriculture in Ukraine and Russia as developing economies and the EU and US as economically developed countries was selected for analysis.

Government support for an economy in Ukraine may be characterized by unfamiliar circumstances. Direct government support offered these animals, however, in a small amount of 50 million UAH per year.

In 2016, transitional works were introduced to keep farms produced by the special VAT alloy regime. It is said that in their production takes 15% - for operations with cereals and industrial crops, 80% - for operations with the production of farm animals, 50% - for those engaged in sectoral operations, and from January 1, 2018, to be resolved the question of the adoption of this transitional norm.

If we compare the volume of state support of Ukraine with other European countries, we can state a high level of state support in agriculture, which has a corresponding impact on improving the level of competitiveness of agar products in European countries.

In the EU, there is a single agricultural policy, with the support of the agricultural sector in 2013-2018 amounting to about 60 billion euros annually, which is almost 525 euros/ha (20% of gross agricultural production) [12].

The level of state support for the agricultural sector varies depending on the country, for example, in Belgium and the Netherlands – about 500 euros / ha, Poland – 345 euros / ha, in Ukraine this figure is in the range of 10-20 euros/ha (this figure is given taking into account the funds that were within the scope of the special VAT regime) [12].

The low level of government support for Ukraine's agrarian sector compared to other countries is evidenced by the OECD-led PSE (Producer Support Estimate). In the EU, 21% of gross agricultural production is reimbursed by the state through various state support programs for the industry, Turkey – 23%, the Russian Federation – 12%, Canada – 11%, the USA – 7%, in Ukraine – within 1-1,5% [12].

To implement an effective state agricultural support policy, a quantitative assessment of its impact on agricultural producers should be carried out.

Analyzing the different methods of assessing the effectiveness of state support for agricultural producers, we can say that there are many today. These methods are used in economic experiments, and they are often discussed between academics and practitioners who perform and lack various methods. This situation is standard for modern science, which is based on the principles of methodological pluralism.

When choosing a specific method of assessing the agricultural policy of the state, it is necessary to take into account as many as possible various aspects, in particular, the purpose of such assessment. The most common and widely used methods are generic methods, especially those used by the WTO and the OECD. The universal indicators for determining the effectiveness of a state agricultural support policy are PSE, CSE and TSE. Also, these indicators do not take into account not the number of funds directly allocated by the state for the needs of the agricultural sector, but also the funds in the form of indirect intervention in the development of the industry. The main advantage of this technique is that it can be used at the regional level.

The experience of advanced countries should be used in the formation of the national model of state support for the agricultural sector of the economy. This model should solve the problematic issues of development of domestic agricultural production. This is primarily an unbalanced structure of agricultural production (where the share of the crop sector is more than 70%), and the production of livestock products does not meet the internal needs of the market. Another important problem in the agricultural sector is the irrational use of land resources, which leads to a decrease in soil fertility.

Another important problem in the agricultural sector is the irrational use of land resources, which leads to a decrease in soil fertility.

Analyzing the level of support for the agricultural sector of the country, one can say that a significant share of the gross value added of agriculture in the economy, although the share of industry support in the gross value added of agriculture is negligible.

In our country, there is an imperfect mechanism of support for agricultural producers, who receive most of the money due to the excess of domestic purchase prices over the world for similar products. In Ukraine, an increase in agricultural output is far behind the GDP growth rate, and the support provided to producers does not contribute to an increase in agricultural output in the economy as a whole.

At present, there is no single methodology for assessing the effectiveness of state support for agriculture. Research on the effectiveness of state support for agriculture has made it possible to establish that for each approach it is necessary to find the optimal system of criteria and factors, what are the prospects for further research.

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INFRASTRUCTURE PROVISION AS A PRIORITY FOR RURAL DEVELOPMENT IN UKRAINE

Kalachevska Larysa
Candidate of Economic Sciences, Associate Professor
Sumy National Agrarian University, Sumy, Ukraine

On the one hand, rural areas are of key importance for the socio-economic system of Ukraine, and on the other hand – we observe significant problems in their development and transformation in accordance with changes within the world, international and national economies. Analysis of the current state of rural areas in Ukraine allows us to highlight bottlenecks of infrastructure provision of rural areas in the country as the main and as those that interfere with their effective development. This enables us to indicate the infrastructure provision as a priority within the modern transformation of rural areas in Ukraine.

Taking into account current state of rural infrastructure in Ukraine, we find O. S. Saienko's point of view on "institutional traps" as appropriate, namely obsolete institutions (in our case – systems of rural infrastructure provision, management and development) are still functioning, which brings substantial losses for economic actors. However the replacement of these institutions with modern ones requires considerable investments that economic actors do not want or cannot take on [8, p. 114].

Such conditions require identification of problems of rural infrastructure provision in Ukraine, assessment of rural infrastructure in certainOblasts, as well as entire rural territories of Ukraine. We consider it appropriate to reveal bottlenecks of rural infrastructure development in Ukraine, taking into account allocation of rural infrastructure components: social, production, institutional and information.

The study of statistical information on rural social infrastructure in Ukraine [9], as well as achievements of domestic scientists [3; 4; 7] allows us to highlight the main problems of social rural infrastructure development:

1. Inefficient development of social facilities necessary for provision of educational services, especially preschool and school education. We note generally low level of financial support necessaryfor provision of such services in rural areas, critical backlog of pre-school and school institutions provision with textbooks, computers and other equipment, problems in training and retraining of teachers, shortage of teaching staff, especially teachers of foreign languages and computer sciences.

2. Critical condition of health care facilities. We would like to focus on: insufficient financial support of such institutions in rural areas of Ukraine; inefficient network of medical institutions and beds in such institutions; bottlenecks regarding recruitment of doctors who are ready to work in rural areas and challenges in training and retraining of medical personnel; difficulties in access to medical services, which a significant number of rural residents face; insufficient provision of rural areas with "Ambulance" services; near absence of

inclusive medical care; inability to get some of modern healthcare services (e.g. cosmetology, modern surgery, ophthalmology, etc.).

3. Development and structure of sport facilities. While cities show a significant lack of sport infrastructure, such facilities are almost near absent in rural areas and their development is supported by a few enthusiasts. According to the statistics as of the end of 2017, only 153 out of 1000 city residents were constantly engaged in sport activities. In rural areas there were 89 out of 1000 [9]. The reasons were as follows: the emphasis was placed on attracting rural residents to sport activities through a network of schools, as it was popular in Soviet times. Under the conditions of modern reduction of schoolnetwork in rural areas and lack of funding, a drastic reduction of sport clubs is observed. Another reasons are lack of financial support needed for development of sport facilities in rural areas of Ukraine; poor opportunities for sport coaches in rural areas.

4. Drastic reduction of cultural institutions (libraries, music schools, cinemas, community centres, etc.). It is caused by insufficient funding of cultural institutions in rural areas, low activity of local authorities, inability to attract cultural workers to rural areas.

In addition to bottlenecks of social infrastructure, we emphasize a significant quantity of problems of production infrastructure in rural areas of Ukraine, which include the following:

1. Critical quality losses of transport infrastructure. It is necessary to highlight the following issues: road ways show up more than 80% of road wear in rural areas; poor quality of rail communication is caused by the more than 70% of wear of rolling stocks and railroad tracks; near lack of usage of waterways is observed due to the poor availability of water transport and the need to restore waterways on small and medium-sized rivers [6, p. 45].

2. Significant wear and insufficient availability of energy networks and water supply and disposal networks for their use by modern enterprises. We notice the critical deterioration of energy supply networks, which have not been restored or re-developed since independence years. Most electric transformers, transformer stations, high-voltage equipment are operating exceeding possible terms determined by their producers. In particular we would like to emphasize the critical wear of electric wire networks. It is also necessary to note the significant challenges for the development of gas networks and water supply and sanitation networks. These challenges occurred during the Soviet Union times and became sharper during the period of independent Ukraine.

3. Issues of sales infrastructure. We would like to mention that under current conditions of rural development in Ukraine only sales infrastructure (pointed at crop production) is being in progress. At the same time, taking into account significant growth of grain and oilseed crop production, as well as such a production started to actively develop only in the 2000s, we indicate the lag of its development regarding needs of agriculture. Particular attention should be given to the insufficient development of sales infrastructure of livestock, fruit and vegetable production. We mark near absence of sales infrastructure for other business units that carry out their financial and economic activities in rural areas and do not belong to the producers of agricultural products.

4. Insufficient development of logistics networks, which force rural producers to develop such networks themselves or to spend additional funds on logistics costs. This includes supply of energy resources, primarily fuel for transport; fertilizers; machinery and equipment; seeds; seedlings of trees and vegetables; computer and office equipment.

5. Poor development of environmental facilities, which leads to problems with local population, state and local authorities that control environmental conditions in the country and in specific regions. This situation entails additional costs for business units that carry out their financial and economic activities in rural areas of Ukraine.

6. Near destruction of recreational infrastructure, which was built during the Soviet Union times. The reasons are as follows: transfer of such infrastructure from the balance sheets of producers (who operate in rural areas) to the balance sheets of local authorities; bankruptcy and liquidation of some producers; chronic shortage of financial resources of local authorities and financing of recreational infrastructure at the end of the line.

7. Transformation of the infrastructure of production personnel training and retraining, which are caused by: infrastructure elements were formed during the period of centrally-controlled economy and currently are critically obsolete; reluctance of business units to participate in the transformation and development of such an infrastructure; reduction of costs spent by state and local authorities for infrastructure development and its maintenance in proper condition; low activity of regional and local governmental institutions aimed at attraction of grants for infrastructure development,obtained from international and foreign donors and necessary for production personnel training and retraining.

8. Critical development of innovation infrastructure, which is associated with the problems of its development at the state level, as well as the reluctance of local governmental institutions and business units to develop and maintain such an infrastructure. We also indicate poor adaptation of foreign experience on the development of such an infrastructure to the realities of national rural areas.

Scientific researches of domestic scientists allow us to allocate several key problems of functioning and development of institutional rural infrastructure in Ukraine (Fig. 1).

Special focus is put on insufficient development of information infrastructure of rural areas of Ukraine, especially the Internet, which is associated with significant costs for its installation in rural areas, as well as its maintenance. Besides we should pay attention on challenges of local information and communication systems, development of which is entrusted to producers, as well as formation of information databases, reference and information resources.

This issue actively hinders rural development in Ukraine and requires development and introduction of innovations. However, it should be noted that the infrastructure provision differs in quality and existing problems depending on specific rural areas of Ukraine. It requires development and introduction of appropriate methodology for assessing rural infrastructure. We consider it appropriate to develop

such a methodology of rural infrastructure provision of certain Oblasts of Ukraine and calculate the integral indicatorof rural infrastructure development as a whole.

While creating such a methodology, the following issues should be considered: inclusion of four components of rural infrastructure provision in Ukraine that were mentioned above (social, production, institutional, and information); allocation of key elements within each of the four components of rural infrastructure provision as they shape these components and have a crucial impact; use of quantitative and qualitative data for evaluation; possibility of attracting experts to conduct such an assessment; calculation of integral indicators for each of the four components of rural infrastructure provision in Ukraine for each of the chosen territory and calculation of the integral indicator of assessment of infrastructure; calculation of the integral indicator of the whole rural areas in the country.

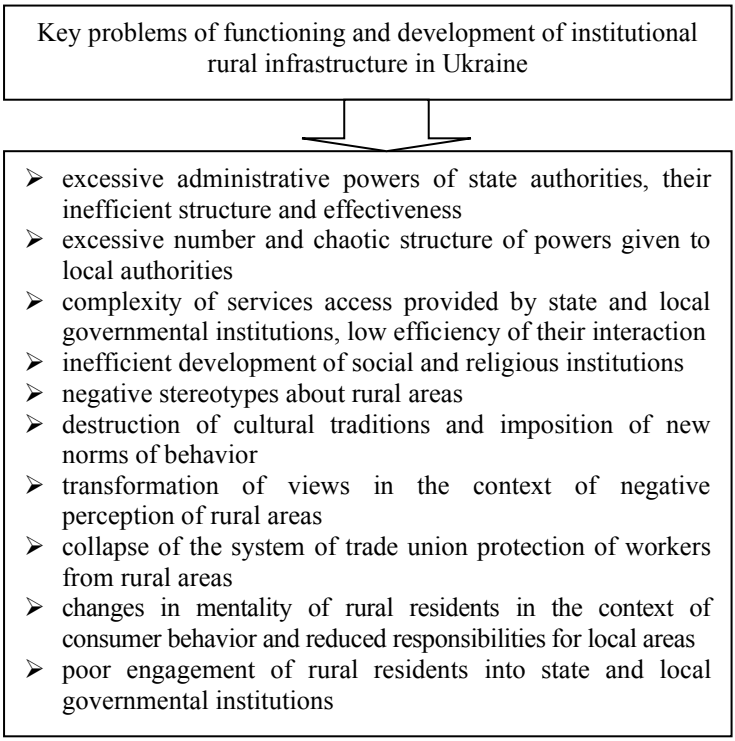

Fig. 1. Key problems of functioning and development of institutional rural infrastructure in Ukraine

Source: on the basis of [1; 2; 5; 11].

We note that each of the selected components of infrastructure provision of rural areas in Ukraine has its own key elements (Fig. 2).

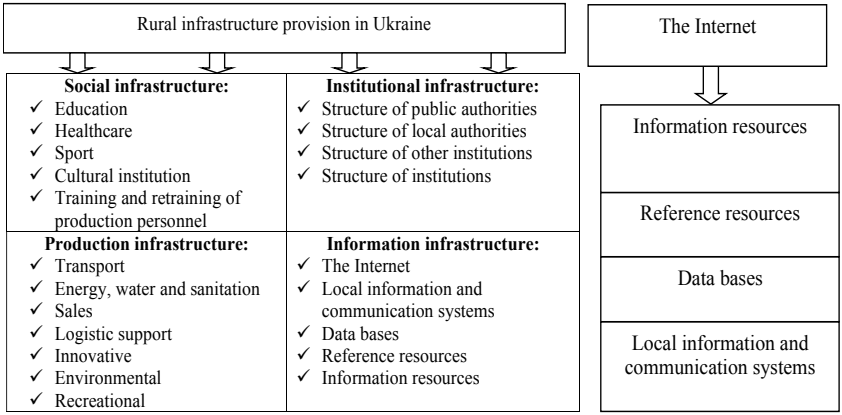

Fig. 2. Components and key elements of rural infrastructure provision in Ukraine

Source: own researches.

During assessment of rural infrastructure provision we must give a numerical reference to each of the key elements from zero to ten, where: the interval from zero to two will mean the critical condition of development of such an element; an interval from three to four – unsatisfactory condition of development of the element; the interval from five to six – satisfactory condition of the element; the interval from seven to eight – good condition of the element; from nine to ten – an excellent condition of the element.

To calculate the integral indicator of development of certain components of rural infrastructure in Ukraine, we suggest using the following formula:

$$I_{cip} = \sum_{i=1}^{n} A_i \times K_{eiii} \quad (1)$$

where I_{cip} – value of the integral indicator of development of certain components of infrastructure provision of Ukrainian rural areas; A_i – unit weight of influence of a certain key element on the formation of the integral indicator; K_{eiii} – indicator to assess the impact of a certain key element on the formation of the integral indicator (a value from zero to ten); I – number of key elements of influence on the formation of the integral indicator.

To ensure the effectiveness of the assessment of the development of components of rural infrastructure provision in Ukraine, we will develop and suggest appropriate evaluation criteria (table. 1).

Table 1. Assessment criteria for the development of components of rural infrastructure provision in Ukraine

$0 < I_{cip} < 2$	$3 < I_{cip} < 4$	$5 < I_{cip} < 6$	$7 < I_{cip} < 8$	$9 < I_{cip} < 10$
Critical development	Unsatisfactory development	Satisfactory development	Good development	Excellent development

Source: own research.

It should be noted that critical and unsatisfactory development of the certain component of rural infrastructure means the need for a sharp increase of investment in its rehabilitation and development, satisfactory condition means the need to increase its level, good and excellent conditions – the need to maintain it in an appropriate level and gradually replace it with a more progressive one.

Having calculated values of four integral indicators of development of certain components of infrastructure provision of Ukrainian rural areas which were singled out, it is possible to calculate the integral indicator of infrastructure development in rural areas of the country:

$$I_{idri} = I_{si} + I_{pi} + I_{ii} + I_{ini} \quad (2)$$

where, I_{idri} – integral indicator of development of rural infrastructure in the country; I_{si} – integral indicator of rural social infrastructure development in the country (values from zero to ten); I_{pi} – integral indicator of rural production infrastructure development in the country (values from zero to ten); I_{ii} – integral indicator of rural institutional infrastructure development in the country (values from zero to ten); I_{ini} – integral indicator of rural information infrastructure development in the country (values from zero to ten).

We consider it necessary to supplement the above formula with assessment criteria for the development of rural infrastructure in the country (Table 2).

Table 2. Assessment criteria for the development of infrastructure provision of rural areas in Ukraine

$0 < I_{idri} < 8$	**$9 < I_{idri} < 16$**	**$17 < I_{idri} < 24$**	**$25 < I_{idri} < 32$**	**$33 < I_{idri} < 40$**
Critical development	Unsatisfactory development	Satisfactory development	Good development	Excellent development

Source: own research.

As for the assessment of the components of rural infrastructure, we should note that critical and unsatisfactory development of rural infrastructure requires increased investment in its rehabilitation and development, in particular with the use of innovations. Satisfactory development indicates the need for its gradual improvement with an emphasis on innovation. And good and excellent development indicates the need for its gradual replacement by a more progressive innovation-based infrastructure.

The above methodology makes it possible to assess the development of rural infrastructure, as well as to clearly identify the components and their key elements that negatively affect such development and do not allow to fully realize the socio-economic potential of national rural territories. At the same time, this methodology can be used to assess the development of infrastructure provision in rural areas in certain Oblasts and districts of the country, as well as to deduct the integral indicator I_{idri}, based on such calculations, which allows identifying Oblasts and districts that require improvement of rural infrastructure. In this case, we suggest the following formula:

$$I_{idri} = \sum_{i=1}^{n} A_i \times I_i(si) + \sum_{i=1}^{n} A_i \times I_i(pi) + \sum_{i=1}^{n} A_i \times I_i(ii) + \sum_{i=1}^{n} A_i \times I_i(ini), \quad (3)$$

where, I_{idri} – integral indicator of rural infrastructure development in Ukraine; A_i – unit weight of influence of a particular region of the country (Oblast, district) on the formation of the integral indicator; $I_i(si)$ – the value of the integral indicator for assessing the rural social infrastructure development in a certain region (Oblast, district) of the country (value from zero to ten); $I_i(pi)$ – the value of the integral indicator for assessing the rural production infrastructure development in a certain region (Oblast, district) of the country (value from zero to Ten); $I_i(ii)$ – the value of the integral indicator for assessing the rural institutional infrastructure development in a certain region (Oblast, district) of the country (value from zero to ten); $I_i(ini)$ – the value of the integral indicator for assessing the rural information infrastructure development in a certain region (Oblast, district) of the country (value from zero to ten); I – the number of regions(Oblast, district) of the country.

In the context of calculating the integral indicator of rural infrastructure development in Ukraine according to formula 3, the question of determining the $A_i$index arises. We consider it appropriate to calculate it, taking into account the share of the region (Oblast, district) in the GDP of the country.

We assess the development of rural infrastructure in Ukraine, based on the developed methodology with an emphasis on the assessment of rural infrastructure in certain Oblasts of the country, starting with the assessment of social infrastructure. It should be noted that there is no statistical information on the development of social infrastructure in rural areas of the Autonomous Republic of Crimea, and there is no such information regarding the temporarily occupied territories of Luhansk and Donetsk Oblasts. Concerning other data for assessing key elements and social infrastructure in rural areas of certain Oblasts of Ukraine, it will be taken not only from the statistical data of the State statistics service of Ukraine, but also from other statistical sources and scientific researches of Ukrainian scientists in order to improve fair of the assessment as well as to reduce to the same values of evaluation according to the assessment criteria from Table 1. The same will be done to assess other components and key elements of rural infrastructure provision in Ukraine. The calculation for every key element of rural infrastructure provision in Ukraine will be done as an arithmetic mean of the values of evaluation of its main characteristics.

Assessment of social infrastructure in rural areas of Ukraine indicates, on the one hand, its mainly critical and unsatisfactory condition, where a particular concern is the condition of sport infrastructure and cultural infrastructure, and on the other hand – it allows us to divide all the Oblasts of Ukraine into three groups: Oblasts with a critical development of rural social infrastructure (Volyn, Ivano-Frankivsk, Rivne, Ternopil, Kherson, Khmelnytskyi, Chernivtsi Oblasts); Oblasts with unsatisfactory development of rural social infrastructure (Vinnytsia, Dnipropetrovsk, Donetsk, Zhytomyr, Zakarpattia, Zaporizhzhia, Kirovohrad, Luhansk, Lviv, Mykolaiv, Odesa, Poltava, Sumy, Cherkasy, Chernihiv Oblasts); Oblasts with satisfactory development of rural social infrastructure (Kyiv, KharkivOblasts).

An important component for assessing the infrastructure provision of rural development in Ukraine is the assessment of the rural production infrastructure in certain Oblasts of the country. We should note that infrastructure provision of rural development is mostly in unsatisfactory condition in all Oblasts of the country, except Kyiv Oblast, where its development can be assessed as satisfactory. It should be noted that the development of innovative and recreational infrastructure is critical in almost all regions of Ukraine. We should focus on the problems concerning the development of infrastructure for production personneltraining and retraining, as well as sales infrastructure and logistics infrastructure in the Western Oblasts of Ukraine.

Special attention should be paid to the critical or unsatisfactory level of transport infrastructure in rural areas of the country. At the same time, if in the Western and partially Central Oblasts of Ukraine we observe the underdevelopment of transport infrastructure, especially roads with asphalt covering and railways, and in relation to rural areas in the East and South of the country we can state their critical deterioration due to inefficient exploitation.

Assessment of the rural institutional infrastructure in Ukraine will be based on the information base, the components of which were described above. They are necessary for assessment of rural production and social infrastructure. We should note the unsatisfactory development of rural institutional infrastructure in each and every Oblast of Ukraine. Considering the complexity and diversity of the development problems of this infrastructure, we should analyze it in more detail in the next paragraph.

Assessment of rural information infrastructure in Ukraine allows us to identify three groups of Oblasts of the country: Oblasts with critical development of rural information infrastructure (Volyn, Rivne, Sumy, Ternopil, Kherson, Khmelnytskyi, Chernivtsi Oblasts); Oblasts with unsatisfactory development of rural information infrastructure (Vinnytsia, Donetsk, Zhytomyr, Zakarpattia, Zaporizhzhia, Ivano-Frankivsk, Kirovohrad, Luhansk, Mykolaiv, Poltava, Cherkasy, Chernihiv Oblasts); Oblasts with satisfactory development of rural information infrastructure (Dnipropetrovsk, Kyiv, Lviv, Odesa, KharkivOblasts). Particularly, we should note the critical development of local and regional information and communication systems, as well as databases in rural areas in almost all regions of Ukraine.

Assessment of rural information infrastructure of Ukraine suggests that it is more developed in those Oblasts, where there is a sufficient number of business entities that are interested in its development within its own financial and economic activities. At the same time, state and local authorities do not pay enough attention to the development of this component of rural infrastructure provision.

Taking into account the conducted research and applying formula 3, we can calculate the integral indicator of rural infrastructure development in Ukraine (I_{idri}) in 2017, for this purpose we will form a corresponding table of initial data (Table 3).

Table 3. Initial data for the calculation of the integral indicator of rural infrastructure development in Ukraine in 2017

Name of the region	I si	I pi	I ii	I ini	Share in the country's GDP, %
ARC (Autonomous Republic of Crimea)	-	-	-	-	-
VinnytsiaOblast	2.75	2.75	3.5	2.8	3.1
VolynOblast	1.75	2.38	3.25	2	1.5
Dnipropetrovsk Oblast	3.5	4.00	3.5	4.8	10.2
Donetsk Oblast	3.75	3.25	3.25	3.8	5.8
Zhytomyr Oblast	2.75	3.13	3.25	2.6	2.0
ZakarpattiaOblast	2.25	2.50	3	2.4	1.4
ZaporizhzhiaOblast	3	3.88	3.25	3.2	4.4
Ivano-Frankivsk Oblast	2	2.38	3.25	2.2	2.2
Kyiv Oblast	4.75	5.13	3.75	5.4	28.8
KirovohradOblast	2.5	2.63	3	2.8	1.9
Luhansk Oblast	2.75	2.38	3.25	2.8	1.3
LvivOblast	3	3.63	3.75	4.2	4.8
Mykolaiv	2.75	2.88	3.25	2.6	2.5
Odesa Oblast	3	4.00	3.25	4.4	5.0
Poltava Oblast	2.75	2.63	3.25	2.8	4.9
Rivne Oblast	2	2.50	3.25	2	1.7
Sumy Oblast	2.25	2.25	3.25	2	1.9
TernopilOblast	2	2.50	3.25	2	1.3
KharkivOblast	4.25	4.00	3.75	4.8	6.5
Kherson Oblast	2	2.75	3	2	1.6
KhmelnytskyiOblast	2	2.50	3.25	2	2.0
Cherkasy Oblast	2.75	2.63	3.25	2.8	2.5
Chernivtsi Oblast	2	2.63	3.5	2	0.9
Chernihiv Oblast	2.75	3.38	3.25	2.8	1.8
Total in Ukraine:	3.46	3.77	3.45	3.96	100

Source: based on [10].

Then the integral indicator will be equal to:

$$I_{idri2017} = 3,46 + 3,77 + 3,45 + 3,96 = 14,64.$$

Based on the criteria for assessing the development of infrastructure provision in rural areas of Ukraine, we can state the unsatisfactory development of rural infrastructure in 2017. It should be noted that this calculation can be made for other years.

Summing up, we should note that, on the one hand, infrastructure provision is a major component of rural development in Ukraine, and on the other hand, based on the calculations made using the developed methodology, we could suggest that

infrastructure is one of the basic discouraging components of rural development in Ukraine, which requires searching and implementing ways to enhance its development on the basis of innovations. In this context, special attention should be paid to the study of institutional provision for the development of rural infrastructure in the country.

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MOTIVATION MECHANISM IN KINDERGARTEN MANAGEMENT IN CHINA

Xia Yuanyuan,
Postgraduate Student
Sumy National Agrarian University, Ukraine;
Henan Institute of Science and Technology, Henan, China
Nataliya Stoyanets,
Doctor of Economic Sciences, assistant of professor
Sumy National Agricultural University, Sumy, Ukraine

Preschool education is not only an important part of national education in China, but also related to the healthy growth of hundreds of millions of children and the future of the nation. The Central Committee of the Communist Party of China and the State Council issued the "Several Opinions on Deepening Reform and Standardization of Preschool Education" in November 2018, proposing the development target that the national preschool children's gross enrollment rate must reach 85%, and the coverage rate of inclusive kindergartens must reach 80% by 2020, and constructs the public preschool education service system of "extensive coverage, basic guarantee and quality" as soon as possible, so as to meet the extensive needs of the society and citizens.

However, the current bottleneck and the biggest shortcoming that restricts China's goal of universalizing the inclusive kindergartens and expanding preschool education resources effectively is the shortage of preschool teachers, especially the shortage of qualified teachers. In recent years, with the development of preschool education in China, the scale of preschool teachers has significantly expanded. Nevertheless, the short-term increase in quantity is difficult to make up for the huge gap in the demand for preschool teachers, and it is even more difficult to meet the urgent needs of popularization, inclusiveness and quality development of preschool education [1]. At two sessions in 2018, the minister of education Chen pointed out that there is a shortage of 710,000 preschool teachers and 760,000 child-care workers currently [2]. Since 2016, China has officially implemented the "Universal Two-child Policy" instead of the previous "One-child Policy", that is to say, in the future every family in China will theoretically have twice as many children as before, which means the shortage of preschool teachers will be further highlighted, which directly affects the expansion and quality improvement of preschool education resources in China. Additionally, the existing kindergarten teachers' work is trivial and complicated, and their work pressure and intensity are very high so that many of them have experienced burnout after a few years of teaching. The enthusiasm and initiative of their work are gradually weakening. They lack passion and have high willingness to change jobs [3]. All these make it more urgent to solve the shortage of preschool teacher resources.

However, it is found that there are limited systematic studies on motivation mechanism in kindergarten management by reviewing the available literature. Therefore, this study analyzes the application of motivation theory in line with the kindergarten in the perspective of kindergarten managers, aiming at stabilizing the in-service preschool teachers and stimulating their enthusiasm and responsibility, thus ensuring the rapid and effective expansion of preschool education and the high-quality development.

2. Review of motivation theory in kindergarten management

It is crucial of motivations in kindergarten management because needs is the intrinsic motivation for the teachers and achievement is a huge source of strength for their efforts [4]. By combing the available literature, it is found that the existing researches on the motivation theory mainly focused on the content motivation theory, process motivation theory and behavior modification motivation theory.

Content motivation theory. The Content motivation theory primarily focuses on the motivation of the engine and mainly includes hierarchy of needs theory, ERG theory and two-factor theory. As a behavioral scientist, Maslow [10] proposed that people's needs could be divided into seven levels, including physiological, security, communication, esteems, cognitive, aesthetic and self-actualization. In his opinion, only when the low needs are satisfied can the high needs appear. There is always a need that predominates and determines behavior in every period. Alderfer corrected Maslow's point of view and put forward three kinds of human needs, namely existence, relatedness and growth, which can flow with each other [7]. Herzberg [10] argued that there are two factors that affect people's work motivation, including health care factor and motivation factor. Health care factor is related to the working environment, while motivation factor mainly refer to the sense of achievement in work, external recognition of work achievements, the sense of responsibility in the position and the development and growth of the career, which can greatly stimulate the enthusiasm of employees.

Process motivation theory. This kind of theory focuses on the psychological process from motivation generation to action, including expectation theory and equity theory. Behavioral scientist Fromm argued that people will choose their behavioral goals and consider the value of the goals before their action [7]. If the value of a certain goal is not attractive to them, or they are not sure to achieve the goal, people will not be motivated. That is to say, only when the goal value and expectation probability are adjusted to the acceptable level of each teacher, can managers maximize the stimulation power. According to the equity theory put forward by Adams, people always compare their contribution and the reward they received with these of another person in equal conditions [7]. If the ratio between the two persons is equal, both sides will have a sense of fairness. The result of comparison will directly affect the enthusiasm of the future work.

Behavior modification motivation theory. Behavior modification motivation theory is mainly about how to motivate behavior in the future, including

reinforcement theory and attribution theory. Reinforcement theory was put forward by the American behavioral scientist Skinner [11], which emphasizes the modification of people's behaviors based on the reinforcement principle. The positive reinforcement refers to giving rewards, praise and recognition to the behaviors required by the organization to consolidate and maintain the behaviors, while negative reinforcement refers to punishing, criticizing and denying the behaviors not needed by the organization to weaken and eliminate the behaviors. Hyde's attribution theory come down success and failure to four reasons, the subjective effort, the actual ability, the difficulty of the task and the opportunity of work [7]. When helping employees to make attributions, managers can change their fear of difficulties caused by lack of confidence and change the negative behaviors into positive ones.

How to motivate teachers' enthusiasm in work with the motivation theory is a significant issue in kindergarten management. There are many researchers that have studied motivation theory in kindergarten management. Liu S. [12] put forward that preschool teachers have both basic material needs and higher spiritual needs, so the managers of the kindergarten could maximum limit arouse the work enthusiasm and sense of responsibility of the teachers from ten aspects. Fan G. [13] highlighted that humanized management should be applied to play an exemplary role in inspiring, open management should be used to promote self-motivation and participatory management to promote mutual motivation among faculty members. Bai H. [14] took Kaifeng Century Star kindergarten in Henan province as an example, and justified that clear goals are the primary condition to achieve motivation, selection of persons according to the positions is the necessary condition to realize motivation, correct evaluation is an crucial method to realize motivation and diversified ways of motivation can effectively unite the team spirit of faulty members. Hu Y. [15] analyzed the problems existing in the motivation mechanism of kindergarten teachers and put forward countermeasures to reform the motivation mechanism. Xu L. [16] discussed the motivation strategies for kindergarten teachers from the perspective of teachers' professional growth, including career motivation, self-reinforcing motivation, training motivation and cultural emotional motivation. Through case study, Wang Y. [17] mainly used Maslow's hierarchy of needs theory to analyze the content and degree of private kindergarten teachers' needs and the current situation of motivation activities for private kindergarten teachers. Zhang M. [18] conducted a questionnaire survey on a total of 204 teachers in six kindergartens in Wuhan city, trying to explore the status quo of preschool teachers' professional development and the status quo of kindergarten teachers' motivation, and proposed strategies to stimulate the professional development of preschool teachers. From the perspective of non-registered teachers in public kindergartens, Zhang R. [19] studied the current situation and characteristics of their motivation needs and satisfaction, analyzed the influencing factors, and put forward effective motivation suggestions to the government, organizers and kindergartens.

To sum up, scholars have focused on the application of motivation theory in kindergarten management, and put forward corresponding suggestions from the perspective of individual kindergarten teachers and the public and private kindergartens. However, the previous study on the application of motivation theory in the kindergarten management is limited in universality, and the analysis of theory guiding practice is not deep enough. Also, the application of classical motivation theory in kindergarten management mainly focuses on Maslow's hierarchy of needs theory, and the comprehensive and systematic research has not been well attempted.

3. Inspiration of motivation theory to kindergarten management

The realization of kindergarten's organizational goals depends on the development and improvement of kindergarten teachers. Every kindergarten teacher contains great enthusiasm and strong initiative, but their enthusiasm is always in a deep sleep and cannot be activated without appropriate stimulation and effective motivation strategy. Kindergarten managers should be good at using various motivation theories to effectively stimulate teachers' enthusiasm and initiative.

3.1 Inspiration of content motivation theory to kindergarten management

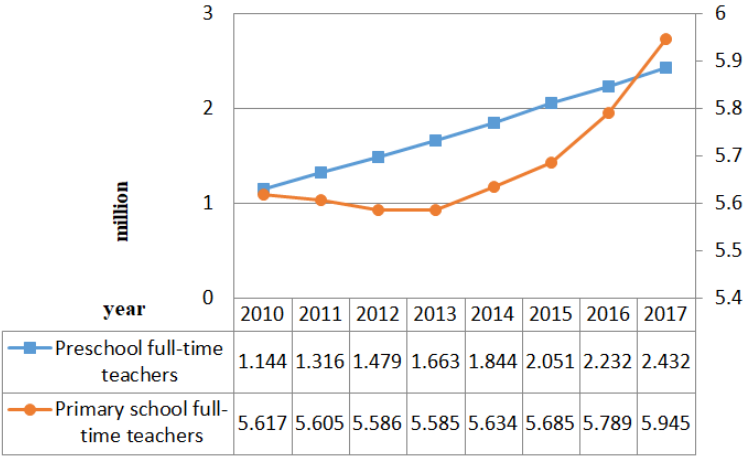
For the motivation of preschool teachers, it is necessary to grasp the current needs of teachers because different teachers may be in different levels of needs, so kindergarten leaders should implement motivation strategies vary from person to person. In view of the serious imbalance between male and female kindergarten teachers, it is necessary to improve the occupational attraction of male kindergarten teachers by increasing the salary, so as to attract more excellent talents to enter the kindergarten. Additionally, existing preschool teachers should be stabilized to avoid further losses caused by teacher shortages [20]. Therefore, for preschool teachers at the initial stage of entry, the survival needs should be appropriately tilted, which is also a necessary condition to stabilize the preschool teacher team. The needs of preschool teachers are a continuous whole, and there is no strict unbridgeable hierarchy, so the motivation strategies for kindergarten teachers should be flexible and operable.

Furthermore, kindergarten managers should create a good working environment and atmosphere for kindergarten teachers, protect the enthusiasm of teachers, and ensure the satisfaction of health care factors. While attaching importance to material conditions, kindergarten leaders should also strive to create conditions based on motivation factor and give preschool teachers more opportunities to show themselves, so that they can have a sense of self-identity and pride, improve occupational attraction, and thus improve their work enthusiasm.

3.2 Inspiration of process motivation theory to kindergarten management

Different teachers have different value pursuits. Only by coordinating and unifying each teacher's value pursuit and kindergarten's value pursuit can the kindergarten leaders effectively stimulate the enthusiasm of teachers in their work. At present, the number of full-time kindergarten teachers is increasing year by year from 1.144 million in 2010 to 2.432 million in 2017, and the increasing range is larger than that of primary school teachers [21], as shown in Fig.1.

However, the gap in the overall situation of kindergarten teachers is still large in reality. In the current situation, how to motivate preschool teachers to stabilize existing teachers and reduce the wastage rate of preschool teachers is essential. In practical work, preschool teachers often use their working age, academic qualifications, professional titles, positions, and implicit contributions as the standard of contribution. Kindergarten leaders should apply the equity theory correctly to the work of summarizing the appraisal, reward and punishment system, work adjustment, promotion, and reduce the unfairness of the preschool teachers and the group. Only by properly handling the relationship between equity and motivation, and rationally applying the equity theory to psychological adjustment of teachers can enhance the sense of professional identity and maintain the stability of the kindergarten teachers.



year	2010	2011	2012	2013	2014	2015	2016	2017
Preschool full-time teachers	1.144	1.316	1.479	1.663	1.844	2.051	2.232	2.432
Primary school full-time teachers	5.617	5.605	5.586	5.585	5.634	5.685	5.789	5.945

Fig.1. Number of full-time teachers in preschool and primary school from 2010 to 2017

3.3 Inspiration of behavior modification motivation theory to kindergarten management.

Kindergarten leaders should adhere to the principle of clear rewards and punishments, and mobilize teachers' enthusiasm and regulate their behavior through positive and negative reinforcement when encouraging kindergarten teachers. However, no matter reward and punishment are only a means rather than an end, the ultimate goal is to mobilize the enthusiasm of teachers.

Also, kindergarten leaders should recognize the attribution tendency of different teachers and emphasize the importance of subjective factors in personal success, so that teachers can maintain a good mood and stable state in education and teaching.

4. Conclusions.

Based on the analysis and review of the existing literature, this study combed the different types of motivation theories, and respectively and systematically discussed the inspiration of motivation theories such as content motivation theory,

process motivation theory and behavior modification motivation theory to kindergarten management. In this study, there is no longer limited to public kindergartens or private kindergartens and mainly focused on the motivation mechanism in kindergarten management based on the actual work of kindergartens, hoping to exert a positive role in kindergarten management. In the following research, it is needed to further explore the motivation strategies of kindergarten managers for preschool teachers at different professional development stages by using empirical methods, so as to further improve the relevant research on motivation theory in kindergarten management.

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CONSTRUCTION OF RURAL GOVERNANCE CAPACITY EVALUATION INDICATORS − BASED ON INVESTIGATION OF RURAL AREAS IN HENAN PROVINCE

Zetao Hu[1,2], Junmin Chen[2]
[1]Sumy National Agrarian University, Ukraine
[2]Henan Institute of Science and Technology, China

The evaluation of rural governance capacity is an important link to assess the economic and social development of rural areas in Henan Province and to realize the modernization of rural areas and the strategy of rural revitalization. It is an important reference to the government to plan relevant rural policies, and it is also an important reference to other organizations such as social enterprises to take part in rural social development. This paper discusses the construction of rural governance capacity indicators by theoretical analysis and qualitative analysis, and develops asset of indicator systems to solve the problem of governance capacity assessment. Constructing the evaluation index system of governance ability from the perspective of social structure theory and workable ability theory is the novelty of this paper, which is beneficial to assess the problems existing on rural governance practices from a deeper level. It will provide reference to the assessment of the governance status of rural areas in Henan or the areas with similar economic and social development in Henan.

The modernization of rural governance capacity is an important part of China's modernization of national governance capacity. The rational evaluation of rural governance capacity is very important to improving the governance capacity of the country. Henan Province is a traditional agricultural province. To realize the requirements of national rural revitalization strategy and modernization of governance capacity, the study of rural governance capacity is an urgent problem to be solved. Domestic researched on governance capacity and governance capacity are mainly concerned with the level of national governance, regional governance and urban community governance. Foreign studies on rural governance mainly focus on land resources, water resources, grassland resources, forest resources and rural landscapes. The evaluation of governance ability and governance ability at the rural level is rarely studied by scholars, and this is exactly what this paper needs to study.

A Summary of the Evaluation Methods of Rural Governance Capability

The domestic and international governance ability evaluation methods can divide into: subject-based methods, goal-based methods and content-based methods.

(1) Subject-based governance ability evaluation method

In his study of government governance, Tom Christensen believes that governance capabilities include the formal structure and procedural characteristics of government administrations, but also include informal elements, how these characteristics work in practice. Chinese scholar Zhu Chongwei summarized the definition of governance ability from the perspectives of target level, the management poin, the organization resource and the governance performance, but they all focused on the evaluation of governance ability based on government. [1] Lu Jun, Ding Fanlin

designed an evaluation index table for each subject's governance ability in the evaluation of urban community governance capacity, a total of 48 indicators [2]. The subject-based evaluation method of governance ability highlights the role of people.

(2) Goal-based governance capability evaluation method

The Goal-Based Governance Capability Assessment Method refers to the evaluation of the effectiveness of governance activities. This method is conducive to showing the gap between the status quo of the governance area and the deep-seated reasons for the governance problem. The World Bank has designed six aspects that describe the degree of modernization of national governance systems and governance capacities, including government accountability and voice, political stability and violence avoidance, government effectiveness, management quality, the rule of law, and the corruption control.According to different goal orientations, Japan divides the evaluation types of local governance capabilities into the business reduction, improvement and promotion, and conducts the performance appraisal of the completion of governance objectives at different stages. This method is mainly applicable to the assessment of the progress and quality of the target completion.

(3) Content-based governance capability evaluation method

After studying the measurement indicators at home and abroad, Ma Deyong and Zhang Lei put forward the "local governance indicators at the township and village level in China" and designed 42 indicators including economics and administration [3]. Based on the multi-governance mechanism of the community, Li Wenjing divides the governance content of three categories: helping disadvantaged groups, improving residents' well-being and meeting life need (public services, business services), and explaining the indicators and contents involved, but the authors have not evaluated the system is indexed. [4] In addition, a three-level evaluation indexed system, such as economic, political, social, cultural, ecological, and the party building, is established according to the content of urban governance, and the second and third levels of economic value, social value, and human value are quantified. Refine the indicators to the community and evaluate the content and quality of community services. [5] Content-based evaluation methods are specific to governance matters, and the level of ability to respond to governance of the governance process.

Definition of a rural governance capacity

The definition of rural governance capacity by domestic scholars is not clear. Since Professor Xu Yong proposed the concept of rural governance of 1998, the development time of rural governance is not very long. The cultivation of the domestic citizen spirit, the construction of the rural governance system, and the improvement of relevant systems still need further development, and relevant research is also focused on empirical research. Although some scholars have proposed countermeasures or measures to improve rural governance, they have not defined rural governance capabilities. When studying the governance ability of rural party organizations, Liu Faqi pointed out that the ability to govern is the organization mobilization ability, the village identification ability, the absorption-integration

ability and the social management ability [6]. Yang Hua believes that rural governance capacity refers to the basic conditions for rural grassroots political power to govern grassroots social affairs, achieve grassroots order, and promote rural economic and social development. It includes comprehensive quality structure such as the organizational system, the power system, infrastructure, and mobilization level [7]. Both scholars define rural governance capabilities from the perspective of grassroots political power. When Chen Cheng and others studied the capacity of community governance, they believed that community governance ability should be the appearance of each subject's ability. It is not a simple addition of the main abilities, but an organic component of the governance capabilities of each subject [8]. Xue Mingzhu believes that the ability of rural governance is the ability of rural governance subjects to use institutional rules to manage various rural affairs. [9]

Summarizing the research results of the above scholars, the author can define the rural governance ability as follows: that is, the rural governance ability is the prerequisite for the various subjects (actors) involved in rural governance to mobilize various resources, take part in rural affairs decision-making and achieve governance goals. The rural governance capacity system can divide into capacity elements and capacity structures. The capacity elements include various resources, such as political resources, economic resources, social capital, etc.; the capacity structure includes the ability to mobilize resources, service capabilities, and village participation capabilities. The ability of rural governance affects the effects of rural governance and the level and quality of rural governance. The high level of rural governance means that all governance entities take part, social order is stable, economic development, the environmental improvement and people's lives are happy. The principle and value orientation of rural governance ability evaluation governance system, and it is a tool to measure the level of rural governance capacity. In addition, it can be used to compare and interpret differences between regions and the value of the policy is relatively high. Therefore, it is necessary to carry out multi-faceted and multi-level analysis according to the various subjects and main contents of village governance; the design indicator system can comprehensively and scientifically reflect the actual level of village governance capacity.

This must follow a certain value orientation and principles in order to set up a scientific and reasonable indicator system. Domestic scholar Yu Keping put forward six principles of local governance: legitimacy, effectiveness, accountability, transparency, rule of law and response [10]. Zhou Wei believes that the value orientation of local governance ability evaluation should choose the purpose orientation and tool orientation of value orientation, among which the purpose orientation includes public security orientation and social welfare orientation; the tool orientation includes multi-cooperative orientation and legal governance orientation. [11] The scientific principles that should be followed should include:

Scientific principle

Starting from the theory of governance and the theory of social structure, we should select the evaluation indicators that reflect the level of rural governance as

much as possible. We must select both fixed and fixed variables, as well as fixed and ordered variables. The statistical principle is used for quantitative analysis and qualitative analysis to obtain a true and reliable evaluation.

Systematic principle

Rural governance is a complex system engineering. First, according to Parsons' theory of social structural function, the overall rural social system includes political system, economic system, social community system and cultural system, and each subsystem interacts with each other. Secondly, the subjects involved in governance are also diversified, and there is also mutual influence on the various subjects. Therefore, the indicators are independent and interconnected to form an organic whole.

Principle of operability

The design of the indicator system lies in the application. For some theoretical indicators lacking operability, it is necessary to find alternative indicators as much as possible to avoid situations where it is difficult to judge or difficult to obtain data, which brings difficulties for scientific and accurate evaluation.

Comparability principle

Indicators must have a wide range of applicability; each indicator has a clear meaning and the statistics are consistent. It can be applied to both horizontal and vertical comparisons.

The construction of governance ability indicators based on social structure theory.

Almond believes that output does not mean the end of the governance structure, but a series of interactions that represent self-sustainment, regulation and transformation. [12] Although Almond is discussing output in terms of national governance, it is applied to rural governance research. Only by establishing an appropriate indicator system can we understand the output of governance activities and thus maintain and promote the optimization of governance structures.

From the perspective of social structure, the operation of capabilities requires a certain resource carrier, and the subjects involved in governance also need to play a role by the social structure in which they operate. The idea of introducing the "structural ontology" theory will solve the problem of "why" in the rural governance subject and how it will be "how". in view of structural ontology, the structural relationship between the internal constituent elements of a thing determines the nature, state, and function as the thing, and the structure also has a structural dualistic effect on the constituent elements. Brown to believe that "social structure" is a "social relationship network" that includes groups, groups, and various kinship, subordinate relationships, and employment relationships. It is not only an inseparable part of people's lives, but also a deep-seated reason for influencing people's ability to participate in governance activities.

Construction of governance capacity indicators of grassroots political agents

Village cadres have relatively strong governance powers based on their political resources and social resources. The social resource ability school represented by Alessandro Potts (1995) believes that social resources are the core of social capital, and the ability to acquire social resources is the essence of social capital. Potts'

theoretical framework of social capital was developed on the basis of social structure theory. The actor's view of Giddens's structuring theory is that to be an actor, it is necessary to be able to implement a series of powers with causal effects, including those that affect the powers that others have implemented. He believes that resources are the medium for the implementation of power and the routine elements of behavior embodied in social reproduction [13]. When actors use resources, they actually have the power. They use power to change the behavior of others, which gives them the ability to implement governance activities.

Grassroots political agents are the most important players in rural governance. Their ability to manage continues to grow and may have two effects. On the one hand, it only obeys the state and the government, that is, the full realization of bureaucratization, which degenerates into the traditional management structure. On the other hand, it forms an autocracy or a monopoly on the village. These two aspects ignore the improvement on the overall governance capacity of the village. Indicators based on the above analysis to measure their governance capacity can be subdivided from two main aspects: the ability to use resources and the ability to service.

Economic resource indicators include per capital GDP, annual income of village collectives, annual expenditures, and liabilities. Qi Haijun believes that there is a positive correlation per capital GDP and social governance capacity indicators. [14] On the one hand, sufficient economic resources provide good conditions for the cultivation of various organizations of the village and the development of various undertakings, so that various organizations of the village can operate normally, and grassroots political power, social organizations and villagers are participating in the village. A benign interaction is formed into the transaction. On the other hand, it can also alleviate dependence on village development on the government's financial resources, and is conducive to the development of village autonomy. But at any time the government has the responsibility for regulating the economy.

The cadres of village can provide good services for the villagers to meet the living and production needs of the villagers. What needs to be pointed out here is to distinguish the difference between demand and desire. The desire is influenced by the social environment, and the demand is affected by its own factors. According to Maslow's theory of hierarchy of needs, in general, people will have higher levels of demand only after meeting physiological and security needs. Security is understood not only as physical security, but also as security for other needs. Everyone needs to meet their needs, whether through the uses of the system or as a reformer or revolutionary. In this case, the social system must respond to individual needs, otherwise it will be affected by instability and forced change (possibly through violence or conflict) (Coate & Rosati, 1988). One of the goals of rural governance capacity is to meet the needs of villagers for rural public goods. This includes rural infrastructure, educational and medical conditions, efficiency of work, rural environment, and quality of service for staff. These are conducive to people's happiness and social stability, which is also a requirement for China to build a service-oriented government.

Villager participation ability based on feasible ability and organization theory.

From the structural point of view, ordinary villagers are generally at the end of the power structure, have limited resources, and have a low level of understanding of the relevant government systems and policies; in the social network structure, they are also difficult to find the position of structural holes, which is beneficial. The market and social information perception ability are slow; in addition, due to the rural population movement, the daily communication opportunities in the villagers are reduced, resulting in the acquaintance society in rural society becoming half of the society. These factors lead to the weakening of the individual and collective action of the villagers. From the perspective of economists, the collective behavior of the organization can expand the rational range of the individual. [15] Collective behavior is a means of achieving strength and a means by which individuals can participate more in rural governance. There are many formal or informal organizations or groups in the countryside. Although most of them are loose and small, they can promote exchanges of villagers to a certain extent, which is conducive to the dissemination and acquisition of information. Some of these organizations have strong cohesiveness, such as family or clan. These organizations are all endogenous behaviors in the countryside. If they can be properly guided, they can better protect the interests in the village and achieve checks and balances with the other two subjects.

From the perspective of development, Amartya Sen defines power as a necessary condition for people to do what it does. It includes both personal and social aspects. [16] I think that the necessary conditions pointed out by Sen also include the rights granted by the governments at all level to the people to achieve self-government and the specific institutional arrangements of the villages, as well as the specific implementation process of these systems. Village information disclosure and policy propaganda are the basis for villagers to participate in governance. The specific institutional arrangements for villages to formulate and implement villagers' participation in village affairs are important ability for villagers to effectively express their interests. In theory of exercising the right to vote, the villagers can form restrictions on the village cadres; attention to village affairs can play a supervisory role.

The ability of other social entities to participate in the perspective of structural holes.

In a social network, all nodes are connected, and there is a "structural hole" between the unconnected nodes (Ronald Porter 1990), and it occupies this special positions / positioned throughout the network. This location gives it the advantage of enjoying all the resources in the network system. In addition, social networks can also spread and send resource allocation, reduce transaction costs and internal losses of resource acquisition. These factors have the potential to attract governance entities to seek structural hole functions. Other organizations (enterprises, cooperatives, etc.) and individuals who are sensitive to this information can take part in the governance of the village by virtue of their own economic resources, social resources and authoritative resources. Thereby bringing momentum to the development of rural society. The reality is that this type of subject is often for profit, and the stronger their ability, the more likely they may be to plunder or monopolize the local village. So, government supervision and village supervision are required.

Table 1.

Rural governance capacity indicator system		
Primary indicator	secondary indicator	tertiary indicator
Rural governance capacity	Grassroots political authority	Villagers' satisfaction with the village roads
		Villagers' satisfaction with the medical conditions in the village
		Villagers' satisfaction with the village's electricity situation
		Villagers' satisfaction with the living environment
		Villagers' satisfaction with the water supply in the village
		Villagers' satisfaction with village communication
		Villagers' satisfaction with the water conservancy facilities in the village
		Villagers' satisfaction with the social security situation in the village
		The general intention of the villagers on the educational conditions in the village
		Satisfaction with public service attitude
		Villagers' satisfaction with the supply of cultural and
		entertainment in the village
		Villager's problem solving ratio
		The speed at which public officials respond to villagers' problems Office information level
		Number of village cadres involved in the organization
		Per capita GDP of villagers (ten thousand yuan)
		Annual average income of village collectives (ten thousand yuan)
		Average annual expenditure of village collectives (ten thousand yuan)
	Village governance capacity	Whether to participate in village election election voting
		Concern for the public affairs in the village
		The ratio of villagers' opinions adopted by the village
		Number of organizations or groups in the village
		The size of the organization of the organization or group
		Family or clan identity
		Publicity of village affairs
		Village affairs announced timeliness
		Is there a special negotiation decision in the village?
		Whether the villagers participate in the negotiation decision
	Other subject governance	Number of companies and cooperatives currently in the village
		Satisfaction of the two committees
		Villager satisfaction
		Number of cooperative or corporate defaults in the village

In his study of the structural adjustment of rural areas in Hungary, Bernadett Csurgo believes that stakeholder investment (local) cooperation is worthwhile because it helps them find common goals and achieve sustainable development [17]. This paper mainly considers the enterprises and cooperatives existing on the village. There are few volunteers, NGOs, and religious organizations in rural areas of Henan. So, they are not considered. The measurement of the governance participation capacity of these productions and operation organizations should underline their integrity, overall service quality and their quantity. These indicators can reflect the intrinsic motivation of the production and operation organization, the village committees and villagers to coexist harmoniously and form a sustainable rural development.

From the perspective of rural social development, it is necessary to improve the governance capacity of each subject, but the ability of independent subjects is not as strong as possible, which requires mutual cooperation to form an organic group as a whole. How to determine the proportion of each subject's ability to achieve optimal status remains to further studied.

Conclusions.

The indicator system is a static system, that is, it is a time slice reflecting the ability of rural governance. It can be used to compare the governance capacity of different regions at the same time and the assessment of the level of governance capacity of a certain area, that is, horizontal comparison. It is hoped that it will have a positive reference to improve governance capacity, improving governance methods, and attracting social investment to participate in rural development. Inadequacies: On the one hand, this indicator system needs further verification and optimization; on the other hand, as a static indicator system, it does not reflect the dynamic change (or vertical change) of rural governance capacity. This will be the direction that the author will study and improve next.

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METHODOLOGICAL PRINCIPLES FOR DETERMINING THE IMPACT OF ENVIRONMENTAL DETERMINANTS ON THE SUSTAINABILITY LEVEL OF THE AGRICULTURAL SECTOR IN THE SHORT AND LONG TERM

Nataliya Stoyanets,
Doctor of economic science, Associate Professor
Sumy National Agrarian University, Sumy, Ukraine

The concept of sustainable development in the classical sense implies the unity and interaction of three subsystems of determinants, namely: economic, social and environmental. Each of the blocks is extremely important, but environmental determinants play a crucial role in the functioning of the agricultural sector of the economy, because, on the one hand, quite often (especially in developing countries) the activities of agricultural enterprises are accompanied by a number of negative environmental effects (pollution). degradation of soils, destruction of populations of certain species of flora and fauna, reduction of forest area, greenhouse gas emissions, etc.), and, on the other hand, environmental problems with high pollution. This is likely to lead to an exacerbation of the risks of food security disruption and of the sustainability of the economy as a whole and of the agricultural sector in particular.

Given the above, from both theoretical and empirical points of view, it is extremely important in the context of managing the sustainable development of the agrarian sector of the economy the study of the impact of various environmental factors on food security and its projection, since the identification of the most relevant factors of influence will not allow collocation. accordingly, to form a program of specific targeted measures aimed at leveling them [1, 2].

In the context of the realization of this task, the identification of potential environmental determinants, which may have an impact on the sustainability targets for the development of the agricultural sector of the economy, becomes necessary. Thus, the analysis of literary sources made it possible to identify the following potential environmental factors that may affect the state of agroindustrial complex, including its sustainable development: use of chemical fertilizers, consumption of combustible minerals, expansion of organic farming technologies and introduction of eco-innovations [3, 7], quality of soils and irrigation systems, yields [8], greenhouse gas emissions, energy consumption, overuse of water resources [4].

Thus, taking into account the factors influencing the development of the agrarian sector of the economy, identified in the research, a sample of potential environmental determinants was formed on the basis of openly available indicators from the databases of the World Bank DataBank [5] and UNEP Environmental Data Explorer [6]. Accordingly, the following indicators include: access to clean fuels and cooking technologies (% of population) (X1); access to electricity (% of population) (X2); access to electricity in rural areas (% of rural population) (X3); access to electricity in cities (% of urban population) (X4); agricultural land (% of total land area) (X5);

Methane emissions from the agricultural sector (% of total emissions) (X6); emissions of nitrous oxide by the agricultural sector of the economy (% of total emissions) (X7); alternative and nuclear energy (% of total energy use) (X8); aquaculture (metric tons) cultivation (X9); arable land (% of total land area) (X10); yield (kg / ha) (X11); carbon dioxide emissions (metric tonnes per capita) (X12); rent for coal production (% of GDP) (X13); combustible renewable energy (% of total energy) (X14); yield index (2004–2006 = 100) (X15); electricity losses during transportation and transmission (% of electricity produced) (X16); electricity production from coal combustion (% of total electricity) (X17); electricity from hydroelectric power plants (% of total electricity) (X18); electricity production from gas (% of total electricity) (X19); production of electricity from oil, gas and coal (% of total electricity) (X20); generation of electricity from renewable sources, except hydroelectric power plants (% of total electricity) (X21); fertilizer consumption (kg / ha of arable land) (X22); afforestation (% of total land area) (X23); rent for the use of forest resources (% of GDP) (X24); consumption of combustible minerals (%) (X25); area under cereals (ha) (X26); methane emissions (% change since 1990) (X27); rent for the use of minerals (% of GDP) (X28); rent payment for natural gas use (% of GDP) (X29); nitric oxide emissions (% change since 1990) (X30); rent payment for oil use (% of GDP) (X31); emissions of other greenhouse gases (% change since 1990) (X32); land under perennial crops (% of total land area) (X33); electricity production from renewable sources (% of total electricity production) (X34); total rent for natural resources use (% of GDP) (X35).

Considering the need to select the most relevant environmental factors for which further empirical research will be carried out, at this stage a correlation analysis of the relationship between the above environmental determinants and the overall indicators of the level of sustainability of the agricultural sector of the economy is carried out.

Table 1. The results of the correlation analysis of the impact of potential environmental determinants on the level of sustainability of the agrarian sector of the economy

Variable	Coef-t.	Variable	Coef-t.	Variable	Coef-t.	Variable	Coef-t.
X1	0,5398	X10	0,4336	X19	-0,1061	X28	-0,3202
X2	0,5969	X11	0,4784	X20	0,2709	X29	-0,2312
X3	0,6517	X12	0,6686	X21	0,5654	X30	-0,2243
X4	0,3378	X13	0,1415	X22	0,4257	X31	-0,2735
X5	-0,1192	X14	0,2316	X23	0,5654	X32	-0,1033
X6	-0,5290	X15	0,0270	X24	0,2900	X33	-0,2508
X7	-0,5452	X16	-0,5248	X25	0,0978	X34	-0,5797
X8	-0,3040	X17	0,4100	X26	0,1271	X35	-0,3370
X9	0,2138	X18	-0,5921	X27	-0,3755		

– Thus, according to the results of the correlation analysis, 14 out of 35 environmental factors were selected, which have a significant correlation (according to the Chaddock scale) with a general indicator of the sustainability of the development of the agricultural sector of the economy.

– The next step involves identifying the link between the relevant environmental determinants and the Sustainability Goal for the agricultural sector and is based on panel based regression analysis (feature sampling varies across indicators, countries and time intervals) using the GroupG tool), namely the Dynamic Fixed Effect (DFE) model specification. The use of this approach is due to the fact that this toolkit allows us to evaluate the relationship between factor and performance traits both in the short- (up to 1 year) and in the long-term. Almost the simulation process is implemented with the help of the xtpmg add-on of the Stata 12 / SE software.

– Therefore, taking into account the results obtained regarding the nature of the impact of environmental determinants on the food security situation as a key measure of the sustainability of the development of the agricultural sector in the 28 countries of the former socialist bloc, the following can be noted:

The main operational priorities for enhancing food security and, accordingly, ensuring the sustainable development of the agrarian sector of the economy are the intensification of work to reduce greenhouse gas emissions (both methane and carbon dioxide), as well as the reorientation to the production and consumption of renewable electricity traditional ones that are more detrimental to the ecosystem (in countries where the use of alternative energy sources is limited, a possible solution to the problem may be to reduce the number of thermal and nuclear power plants in favor of hydroelectric power plants);

Key vectors for strategic development of the agro-industrial complex with emphasis on mitigating the risks of food security deterioration can be distinguished: intensification of efforts to reduce carbon dioxide emissions not only in the agricultural sector but also in the industries; the continuation of rural electrification and the provision of environmentally friendly fuels and electricity to the population, with the transition from traditional sources of energy to alternative sources of importance in this process; growing arable land and increasing forest cover while moving to intensive rather than extensive agricultural management.

Consideration of these patterns should be the basis for the development of state policy in the field of management of sustainable development of the agricultural sector of the economy.

Some environmental determinants may be relevant to the overall indicator of the sustainability of the agricultural sector, but not have a statistically significant effect on its constituents (sub-indices). In addition, it is important to specify specific environmental stimulants and inhibitors to ensure sustainable development in the context of particular areas of food security in order to formulate a sound agricultural policy at the national level. Based on this, the approach to determine the short and long-term relationships between environmental factors and the sustainability target of the agricultural sector is used to implement similar empirical studies for each of the four subindices of the agrarian sector's sustainability indicator.

After identifying relevant environmental impact factors for each of the food security subindices as target parameters of the sustainability level of the agricultural

sector, it becomes relevant to apply one of the regression analysis tools to determine the strength and nature of the impact of the selected determinants on each of the food security projections as well as in the food security projections. and the long term.

The first block of results (short-term coefficients of dependence) in the context of all four subindices is given in Table. 2.

Table 2. The results of determining the impact of environmental determinants on subindices of a generic indicator of the sustainability level of development of the agricultural sector of the economy in the short term

Variable	Availability	Access	Stability	Utilization
	Short-term dependency ratios			
X1	-0,0194 (0,0319)	-0,0027 (0,0160)	0,0680*** (0,0248)	-0,0000 (0,0018)
X2	0,0279* (0,0153)	0,0227 (0,0209)	0,0309* (0,0185)	
X3	0,0245* (0,0131)	0,0217** (0,0108)	0,0177 (0,0159)	0,0009* (0,0006)
X6		-0,0016 (0,0042)		
X7		0,0005 (0,0008)	-0,0007 (0,0011)	-0,0002* (0,0001)
X10			0,0053** (0,0026)	
X11		-2,86e-06 (5,11e-06)		
X12	-0,0157*** (0,0051)	-0,0081 (0,0082)	-0,0194* (0,0104)	-0,0000 (0,0014)
X16		-0,0003 (0,0003)	-0,0021*** (0,0005)	
X18	-0,0015 (0,0031)	-0,0022** (0,0009)	1,0208 (1,0189)	-0,0016* (0,0009)
X21	-0,0053 (0,0042)		1,0464 (1,0225)	
X22		-0,0003 (0,0002)		
X23	0,0126 (0,0146)	0,0719 (0,0787)		0,0053 (0,0051)
X27			-0,0030* (0,0017)	
X34	0,0002 (0,0033)		-1,0239 (1,0188)	0,0014* (0,0009)

Notes: *** - statistical significance at 99% confidence interval; ** - statistical significance at 95% confidence interval; * - statistical significance at 90% confidence interval

Results of a multivariate regression analysis using the PMG toolkit found that in the short term, only 3 of the 8 environmental determinants have a statistically significant effect on the availability of food in one of the acceptable confidence intervals (90%, 95%, or 99%): population growth having access to electricity (in general and in the countryside in particular) contributes to improving the dynamics of productive subindex, while increasing per capita carbon dioxide emissions, on the contrary, will stomp the inhibitor of the state of the availability of food.

However, with the largest number of relevant environmental determinants, only 2 of the 11 factors have a statistically significant impact on access to food in the short term. Thus, an increase of 1% of the population in rural areas with access to electricity is accompanied by a rise in the sub-index of access to food by 0.0217 units, while an increase of 1% of the share of electricity produced by hydroelectric power plants causes a reduction of subindex of 0.0022 units.

The broadest list of environmental factors that have a statistically significant impact on the relevant subindex is characterized by food stability. Thus, in the short term, the increase in the level of electrification of the population and the expansion of arable land contributes to the enhancement of food stability, while the destructive environmental determinants for this food security project are the increase of carbon dioxide, methane emissions and transmission losses during its transport.

More than half (4 of 7) of the relevant environmental factors for the projection of "quality of food consumption" are statistically significant in the short term. In particular, a 1% increase in rural population with access to electricity causes an increase in the target subindex of 0.0009 units, and a 1% increase in the share of electricity produced from renewable energy sources improves the Utilization subindex by 0.0014 units. In turn, the quality of food consumption is exacerbated by factors such as the expansion of nitrous oxide by the agricultural sector of the economy and the increase in electricity generated by hydroelectric power plants.

The results of the impact of relevant environmental determinants on the sustainability sub-indices of the agricultural sector are shown in table. 3.

Table 3. The results of determining the impact of environmental determinants on subindices of a general indicator of the sustainability level of development of the agricultural sector of the economy in the long run

Variable	Availability	Access	Stability	Utilization
	Long-term dependency ratios			
X1	0,0036 (0,0031)	0,0071(0,0082)	0,0070***(0,0018)	0,0079*(0,0058)
X2	0,0102 (0,0288)	-0,1489(0,1751)	0,0280(0,0288)	
X3	0,0889** (0,0474)	0,2063*(0,1144)	-0,0126(0,0238)	0,0029(0,0356)
X6		-0,0137(0,0181)		
X7		-0,0032(0,0065)	0,0012(0,0021)	-0,0012(0,0047)
X10			0,0142***(0,0036)	
X11		0,0000 (0,0000)		
X12	-0,0350***(0,0123)	-0,1149***(0,0446)	0,0153(0,0136)	0,0014(0,0211)
X16		0,0030(0,0027)	-0,0036***(0,0006)	
X18	0,0061(0,0083)	0,0187**(0,0094)	3,4229**(1,9381)	-0,0294(0,0254)
X21	0,0114(0,0093)		3,4126**(1,9361)	
X22		0,0021*(0,0011)		
X23	0,0068(0,0113)	0,1997*(0,1091)		0,0094(0,0422)
X27			0,0026**(0,0012)	
X34	-0,0038(0,0082)		3,4286**(1,9378)	0,0268 (0,0221)

Notes: *** - statistical significance at 99% confidence interval; ** - statistical significance at 95% confidence interval; * - statistical significance at 90% confidence interval

The results of the analysis show that:

- a key strategic and operational driver for improving the availability of food (Availability) is the extension of the proportion of urban and rural people with access to electricity (with a focus on rural development in the long run), while the main stimulus in positive change this is an increase in per capita carbon dioxide emissions (an increase in emissions per metric tonne per capita will lead to a worsening of food levels goods at 0,0350 units);

- Access to food (Access) is improved in the long run by expanding the electrification of the rural population, increasing the share of electricity produced by hydroelectric power plants; increased consumption of fertilizers and forestry, whereas the major strategic destructive factor is the increase in carbon dioxide emissions per capita (increasing emissions by 1 metric tonne per capita will lead to a worsening of food access by 0.1149, whereas the index itself may to acquire a maximum value of 1,9851 units in the most favorable scenario, i.e. control over the destructive influence of this determinant should be of particular priority);

- the list of long-term drivers of food stability include: increased access to clean fuels and technologies for cooking, arable land, electricity from hydroelectric power plants and electricity from renewable sources, change in methane emissions (compared to 1990), while being the only other relevant there is an increase in electricity losses during its transportation and transmission; the abnormally high coefficients for variables X18, X21 and X34 indicate the unconditional importance of building a renewable electricity segment to improve food stability;

- in the long run, the only positively relevant environmental factor for the sub-index of food quality utilization (Utilization) is an increase in access to clean fuels and cooking technologies, namely: a 1% increase in the proportion of the population having access to them leads to an increase in the target development of the agricultural sector of the economy in the context of this projection by 0.0079 units.

Summarizing the results of this study block, it can be noted that the use of the Pooled Mean Group method (specification of regression model with dynamic fixed effects) allowed to specify operational and strategic environmental drivers and inhibitors of the targets of the level of sustainability of the development of the agricultural sector, as well as in the whole economy by projection) for 28 countries of the post-socialist bloc (2000–2016).

Thus, the identification of operational factors of stimulants and stimulators to ensure the sustainability of the development of the agrarian sector of the economy through the environmental channel has allowed to identify the most mobile directions of influence on the managed subsystem. In particular, controlling greenhouse gas emissions (both directly from the agrarian sector of the economy and from all anthropogenic activities) should be one of the key operational and strategic priorities, since the impact of this block is determinants on the overall indicator of sustainability and the sustainability indicator economic sectors and sub-indices of food security projections (in varying variations) are strong and negative already in the short term, continuing destructive action and in the long run (as in Avila, the negative effect becomes stronger, as evidenced by the increase in the absolute value of the coefficients

with the corresponding variables in the models). This effect, on the one hand, should be taken into account in the context of developing a system of preventive measures within the framework of sustainable development management of the agrarian sector of the economy (preventing large-scale increase of emissions, and in the optimistic scenario of events - reducing them), and on the other hand, can be used for comparative purposes. the rapid improvement of the status of an individual projection of food security or its integrated level (since the impact of this determinant group is large-scale in the short term, eliminating these threats can give quite a ydkyy and visible effect).

In addition, the continuation of the vector for expanding the electrification of the rural population has a positive effect in the time horizon of up to 1 year on the availability, access and quality of food consumption, the positive effect of which changes in the long run is only expanding, and therefore this environmental determinant should be the focus as a strategy and operational agrarian policy.

At the same time, the transition from traditional to renewable sources of energy in the short and long term is no less important vector of increasing the level of sustainability of the agricultural sector (and its projections including). The development of alternative energy should be a key focus of long-term public policy, since such a transformation will not only benefit the agricultural sector in the context of food security, but also contribute to the greening of the economy, its innovation and energy independence from burnt minerals.

In general, most of the environmental determinants that have a strong and statistically significant impact on the sustainability targets of the agrarian sector of the economy, affect them in the long run, but the strength of this influence is increasing. That is why the main management effect of the identified patterns can be planned and achieved over a longer time horizon, although interim results will be noticeable in the short term.

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THE IMPACT OF DEMOGRAPHIC AND SOCIO-ECONOMIC FACTORS ON THE DEVELOPMENT OF RURAL COMMUNITIES

Viktorya Medvid, D.Sc. (Economics), Associate Professor,
Professor of Economics Chair, Sumy National Agrarian University
Viacheslav Pylypenko, PhD.Sc. (Economics), Associate Professor,
Associate Professor of Economics Chair, Sumy National Agrarian University
Nadiia Pylypenko, PhD.Sc. (Economics), Associate Professor,
Associate Professor of Economics Chair, Sumy National Agrarian University

The territorial and sectoral organization's features and the course of reproduction processes in a certain territory depend largely on the availability of its potential main components. The determinative component of the maximum involvement of the productive forces' elements and the achievement of the required level of socio-economic development in particular territory is its qualitative characteristic. The quality of the aggregate socio-economic potential of a specific territory is measurable through the evaluation of human, natural and resource, productive, organizational, scientific and technical potentials. The quality of the socio-economic development of a particular territory should correspond to its purpose. This requires a set of relevant criteria for its evaluation.

Modern problems of socio-economic development of rural areas are conditioned by the existing terms for involvement and usage of productive forces' separate elements, monofunctionality and concentration around agriculture. The population density of rural areas has a negative trend, which is primarily connected with the lack of support for entrepreneurial initiatives and sources for investment's support, the unsatisfactory level of social infrastructure and social services development, the lack of opportunities for self-realization.

High-quality socio-economic development of a rural territory providing, maximizing the cumulative potential is impossible without a thorough research of the problems and directions of economic development priority, taking into account the influence of demographic and socio-economic factors, which indicates the relevance of this scientific research. It was carried out in accordance with the research plans of Sumy National Agrarian University (Sumy, Ukraine): «Formation of the implementation's mechanism for the integrated territorial management in the context of the transition to sustainable development» (SR № 0117U006534) and «Theoretical and practical aspects of diagnosing the functioning of a regional economic system» (SR № 0117U000911).

The theoretical basis for scientific research were works of researchers, who devoted much attention to solving the problems of rural territories socio-economic development. In particular, T. V. Gogol (2011) emphasized the research of the labor market and employment's problems in rural areas and the formation of perspective directions of rural territory multifunctional development. M. I. Dyachenko & A. V. Movchanyuk (2018) undertook an attempt to develop a new ideology of rural

development, which will contribute to psychological climate improvment in the countryside and overcoming the rural population's uncertainty in its future.

Today, the reform of local power forms a new paradigm of rural development, opens new approaches to the development of rural areas. Thus, the peculiarities of the decentralization reform impact on the socio-economic development of rural territory were reflected in the works of M. I. Dyachenko & A. M. Movchanyuk (2018), M. I. Stegney (2016).

The importance and priority of the integrated projects development, that can produce a systemic effect on the rural areas development, is justified in the work of O. O. Gutorova, (2016). Such local projects of socio-economic development should be one of the effective measures to reduce the demographic depression of a rural territory and increase the standard of living for population.

Special attention should be paid to the foreign experts developments in determination of socio-economic factors influence on the rural areas development. So, Alain de Janvry & Elisabeth Sadoulet, (2007) made an attempt to identify patterns between a progress of rural territory social development and an increase in population incomes, reducing the range of economic indicators inequality. The need for eco-innovative development (Torre A. & Wallet F., 2013), the formation of competitive positions (Dyachenko MI & Movchanyuk AV, 2018) of rural areas is a priority task of the state.

Moreover, the main aim in the rural development organization should be active work with individual elements of economic relations. Conducting sociological researches, identifying the views of community residents on the problems and prospects of the progressive development of a rural territory, taking into account the influence of demographic, gender and socio-economic factors are modern methods of public involvement maximizing in strategic planning of the territory development, enhancement of initiative and improvement of dialogue between the authorities and the community.

The purpose of this research is to analyze **the impact of demographic and socio-economic factors on the assessment of the rural areas' development directions** in the context of the administrative and territorial reform in Ukraine.

This article is based on the analysis of the results obtained in the course of a sociological survey conducted by the authors in 2018 of residents of the Znob-Novgorod United Territorial Community (UTC) of the Sumy region in order to identify priority problems and development directions in developing a development strategy for the period 2019-2025.

This community includes 27 settlements, which were combined into 8 village councils.

The total population as of 01/01/2018 is 4630 people.

The sample consisted of 307 respondents, representing 6,6% of the total population. The survey was conducted in all 8 village councils, which ensured the representativeness of the sample (Table 1).

Initial information was collected by questionnaire. To select respondents, a combined sample was used. The proportion of respondents in the total population

of different rural councils varies considerably. The reason is the varying activity of residents in discussing the community's pressing problems.

Table 1. The population (as of 01.01.2018) and the number of respondents who participated in the survey

The name of the village councils that are part of the community	Total population	Participated in the survey, persons	Share of respondents in the total population%
Znob - Novgorodskoe	1981	101	5,1
Znob-Trubchevskaya	393	27	6,9
Novovasilyevka	251	3	1,2
Styagaylovka	160	37	23,1
Golubovka	301	27	9,0
Ochkino	578	59	10,2
Krivonosivka	463	31	6,7
Krenidivka	503	22	4,4
Total:	4630	307	6,6

*source: own research authors

The main task of the survey was to determine the priority problems and directions of community development, taking into account the influence of demographic and socio-economic factors. To this end, this research focused on key issues related to assessment of the current state, identifying key problem, the main directions of their solution, and willingness to active participation in community development projects.

Results.

The main socio-economic and demographic characteristics of respondents

Three age groups were identified: up to 35 years old (29,7%), 35 years to 60 years (52,4%), over 60 years (17,9%), that reflects all major age groups of UTC residents.

The structure of respondents in terms of employment is shown in Fig. 1

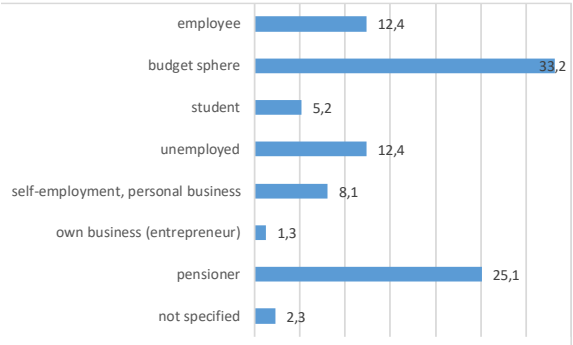

Fig. 1. Social status of respondents, %

*source: own research authors

The social status of respondents to some extent also affected the distribution of respondents in terms of received income, as shown in Fig. 2

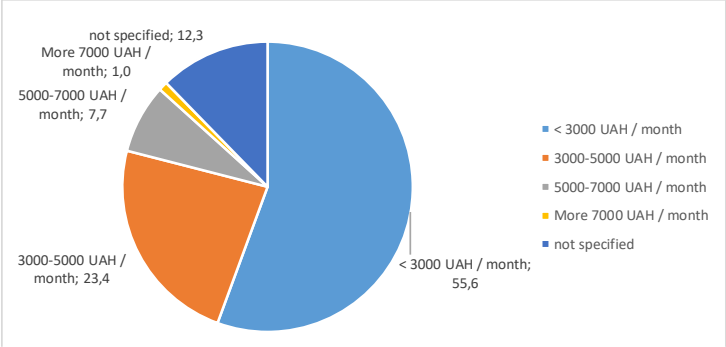

Fig. 2. Distribution of respondents by income level, %

*source: own research authors

The structural distribution of respondents by level of education is presented in Fig. 3

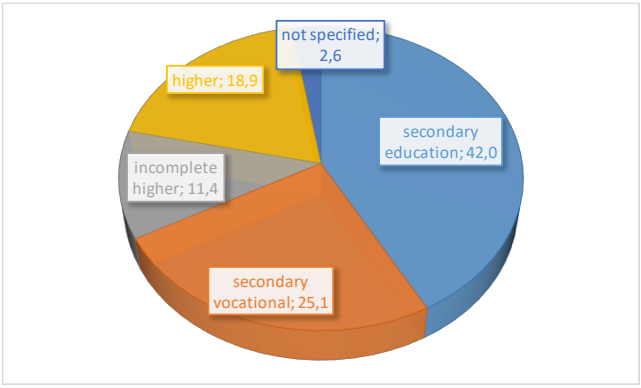

Fig. 3. The structure of respondents by level of education, %

*source: own research authors

Describing the level of respondents' education, it should be noted that two thirds have secondary and vocational education and only one third complete and incomplete higher.

Analysis of survey results

For a comprehensive assessment of the situation in the community, respondents were asked the question "Which of the following statements would you characterize Znob-Novgorod UTC."

The analysis showed that, in general, negative evaluations prevail (72% of the respondents), but they fluctuate depending on the demographic and socio-economic characteristics of the respondents (Table 2).

Young people and seniors are more positive about life in the community, as the main responsibility for solving economic and domestic problems lies with middle-aged people.

Table 2. Demographic and socio-economic differences in the assessment of UTC

Characteristics of respondents	Positive assessments ("I live here comfortably," "I want my children to live here," "there is where and how to realize myself", "I recommend my community for living to my friends")	% Of the total number of respondents	Negative assessments ("I just have to live here," "there are no perspectives for development here," "I will definitely leave this place at the first opportunity")	% Of the total number of respondents
Age of respondents, years:				
< 35	28	30,4	64	69,6
35-60	36	22,4	125	77,6
over 60	22	40,7	32	59,3
Level of education				
secondary education	32	24,6	98	75,4
secondary vocational	28	36,4	49	63,6
incomplete higher	11	31,4	24	68,6
higher	13	22,4	45	77,6
not specified	2	28,6	5	71,4
Employment (Kind of activity)				
employee	11	28,9	27	71,1
budget sphere	28	27,5	74	72,5
student	4	25,0	12	75,0
unemployed	6	15,4	33	84,6
self-employment, personal business	4	16,7	20	83,3
own business (entrepreneur)	4	100,0	0	0,0
pensioner	25	32,5	52	67,5
not specified	4	57,1	3	42,9
Income level, UAH / month				
< 3000	47	27,3	125	72,7
3000-5000	22	31,0	49	69,0
5000-7000	10	41,7	14	58,3
More 7000	0	0,0	3	100,0
not specified	7	18,9	30	81,1
Total	86	28,0	221	72,0

*source: own research authors

Quite ambiguous is the influence of the education level - more positively are respondents who have an education above average and below full higher, respondents with secondary and full higher education have more pessimistic assessments. Obviously, this is due to the fact that both groups have fewer perspectives for development. But the reasons are different: respondents with the worst education level understand the lack of career growth, and respondents with higher education level do not see the opportunities for development in the community in general. It is quite logical to have a smaller share of positive responses among respondents who have problems with employment - unemployed and engaged in private sector, as this affects their development opportunities. The share of positively adjusted respondents is growing, with the increase in the level of income received from the minimum to the average in the region, which is generally logical. The total absence of positive answers among the most highly paid respondents may be explained by the small number of respondents (3 people) and by the fact that they have practically exhausted the potential for growth of incomes in the existing conditions.

The age differences in the assessment of the society main problems are significant enough (Table 3).

Thus, only 23.6% of interviewed pensioners consider insufficient activity of residents as an important problem against 36.2% among middle-aged people. Significant differences in the assessment of the impact of the low unemployment rate - almost one and a half times the proportion of pensioners than among young people and middle-aged people. There is a tendency to increase the requirements for the possibility of self-realization with a decrease in the age of the respondents, which is a completely natural phenomenon. A number of problems, such as environmental, infrastructural, and educational issues, are of great concern to middle-aged people than to young people and older generations. This can be explained in different ways. Young people do not always feel the severity of these problems, since they are under the protection of their parents, and older people are already accustomed to these problems and react not so sharply to them. At the same time there are problems that practically do not have "age color" - unemployment, unfavorable conditions and insufficient enterprisingness of inhabitants, that is, problems of economic direction.

Table 3. Age differences in the assessment of existing community problems

Factors	Percentage of answers, % to respondents			
	Average	Age of respondents, years		
		< 35	35-60	over 60
1	2	3	4	5
Insufficient public initiative and activity of residents	32,6	31,9	36,0	23,6
Unemployment	57,7	56,0	59,0	56,4
Low income	59,3	62,6	63,4	41,8
Lack of opportunities for self-realization, providing meaningful leisure	37,5	41,8	36,6	32,7

Continuation of table 3.

1	2	3	4	5
Unfavorable conditions for the development of entrepreneurship	26,1	25,3	27,3	23,6
Lack of awareness about the community outside	21,2	14,3	24,2	23,6
Ecological condition, environmental contamination	20,8	17,6	23,0	20,0
The spread of crime, alcoholism, narcotism	38,4	36,3	41,0	34,5
Lack of community entrepreneurship	26,4	25,3	27,3	25,5
Lack of investment	45,0	39,6	47,8	45,5
Low quality (lack of) road pavement between settlements of the village council	54,1	51,6	57,1	49,1
Depreciation of engineering networks (water supply, water disposal)	41,0	34,1	47,2	34,5
A significant part of the population of older working age	30,3	20,9	34,2	34,5
Poor quality of preschool education	12,1	9,9	14,9	7,3
Low quality of secondary education	10,7	7,7	13,0	9,1
Lack of a developed network of a trade network's development	13,4	9,9	16,8	9,1
Lack of a public service institutions' development	20,2	11,0	24,2	23,6
Inadequate quality of care	34,5	30,8	38,5	29,1

*source: own research authors

An ambiguous picture is shown by the analysis of responses in terms of the respondents' educational level (Table 4).

A significant part of the problems with a slight increase in the level of education (secondary vocational, incomplete higher education) becomes less significant for respondents, but for those with complete higher education, the urgency of these problems is rising again. This also applies to economic problems, both environmental and infrastructural.

Table 4. Impact of education on the assessment of existing community problems

Factors	Percentage of answers, % to respondents			
	Level of education			
	secondary education	secondary vocational	incomplete higher	higher
1	2	3	4	5
Insufficient public initiative and activity of residents	33,8	32,6	22,9	39,7
Unemployment	62,3	58,9	45,7	56,9
Low income	61,0	56,6	51,4	69,0

Continuation of table 4.

1	2	3	4	5
Lack of opportunities for self-realization, providing meaningful leisure	36,4	39,5	34,3	36,2
Unfavorable conditions for the development of entrepreneurship	28,6	27,1	22,9	24,1
Lack of awareness about the community outside	27,3	19,4	14,3	24,1
Ecological condition, environmental contamination	20,8	25,6	5,7	20,7
The spread of crime, alcoholism, narcotism	44,2	44,2	25,7	31,0
Lack of community entrepreneurship	23,4	28,7	25,7	27,6
Lack of investment	40,3	46,5	40,0	53,4
Low quality (lack of) road pavement between settlements of the village council	50,6	49,6	62,9	65,5
Depreciation of engineering networks (water supply, water disposal)	42,9	42,6	45,7	34,5
A significant part of the population of older working age	33,8	29,5	25,7	34,5
Poor quality of preschool education	13,0	14,7	5,7	10,3
Low quality of secondary education	14,3	11,6	2,9	10,3
Lack of a developed network of a trade network's development	16,9	13,2	5,7	13,8
Lack of a public service institutions' development	23,4	18,6	14,3	22,4
Inadequate quality of care	27,3	34,9	34,3	43,1

*source: own research authors

Persons with a higher level of education in comparison with other major problems consider insufficient social initiative and activity of inhabitants, low income of the population, lack of investments, unsatisfactory condition of roads, poor quality of medical services. For people with a low level of education, the problem of alcoholism and narcotism is much more urgent.

The impact of income level of respondents on the assessment of problems is described in Table 5.

Table 5. Impact of income level on the assessment of existing community problems

Factors	Percentage of answers, % to respondents				
	Income level, UAH / month				
	< 3000	3000-5000	5000-7000	More 7000	not specified
Insufficient public initiative and activity of residents	25,7	40,3	54,2	33,3	35,1
Unemployment	56,1	58,3	45,8	66,7	70,3
Low income	52,6	66,7	79,2	66,7	62,2
Lack of opportunities for self-realization, providing meaningful leisure	35,1	48,6	29,2	33,3	32,4
Unfavorable conditions for the development of entrepreneurship	26,3	27,8	25,0	33,3	21,6
Lack of awareness about the community outside	19,9	20,8	29,2	0,0	24,3
Ecological condition, environmental contamination	21,6	19,4	33,3	0,0	13,5
The spread of crime, alcoholism, narcotism	37,4	34,7	50,0	33,3	43,2
Lack of community entrepreneurship	22,2	33,3	45,8	33,3	18,9
Lack of investment	39,2	56,9	66,7	33,3	35,1
Low quality (lack of) road pavement between settlements of the village council	45,6	69,4	75,0	100,0	45,9
Depreciation of engineering networks (water supply, water disposal)	37,4	43,1	66,7	66,7	35,1
A significant part of the population of older working age	32,7	30,6	29,2	66,7	16,2
Poor quality of preschool education	10,5	13,9	25,0	33,3	5,4
Low quality of secondary education	10,5	8,3	20,8	33,3	8,1
Lack of a developed network of a trade network's development	13,5	15,3	12,5	33,3	8,1
Lack of a public service institutions' development	21,1	20,8	29,2	33,3	8,1
Inadequate quality of care	27,5	43,1	75,0	33,3	24,3

*source: own research authors

A tendency is observed with an increase in the growth of respondents' income level, which among the most problematic issues are the quality of education and medical services, infrastructure problems, lack of investment, as well as insufficient entrepreneurship and social activity of residents. At the same time, unexpected was a reduction connected with income level decrease of respondents' share who considered the priority problem to be low income. Most likely, this is due to the fact that a group of low-income respondents includes retired people who have less material needs compared with the economically active population (Table 6).

Persons, who study in colleges and universities, by reason of their age are less likely than others to respond to problems with preschool education, the quality of medical care and the demographic situation (a significant proportion of pensioners). Persons occupied in private sector of economy, less than others, take into account the inadequate activity and enterprisingness of residents, as well as insufficient opportunities for self-realization. Obviously, this is due to the fact that they independently provide their existence. It is characteristically that this category of respondents almost twice as often points to the problem of alcoholism and narcotism! It is quite clear that more often others point to the problems of unemployment and the associated low income and the spread of alcoholism and narcotism unemployed. The remaining characteristics of the assessments of different groups of respondents (on the basis of the activity type) are quite varied and do not show clearly defined tendencies.

Table 6. The impact of the activity to assess existing community problems

Factors	Percentage of answers, % to respondents							
	Employment (Kind of activity)							
	employee	budget sphere	student	unemployed	self-employment, personal business	own business (entrepreneur)	pensioner	not specified
1	2	3	4	5	6	7	8	9
Insufficient public initiative and activity of residents	36,8	35,3	31,3	34,2	24,0	75,0	27,3	25,0
Unemployment	57,9	52,9	62,5	71,1	64,0	75,0	54,5	37,5
Low income	65,8	61,8	56,3	73,7	56,0	50,0	48,1	50,0
Lack of opportunities for self-realization, providing meaningful leisure	47,4	43,1	37,5	36,8	24,0	25,0	31,2	25,0
Unfavorable conditions for the development of entrepreneurship	39,5	27,5	31,3	23,7	16,0	25,0	23,4	0,0
Lack of awareness about the community outside	15,8	22,5	31,3	21,1	16,0	0,0	23,4	12,5

Continuation of table 6

1	2	3	4	5	6	7	8	9
Ecological condition, environmental contamination	21,1	21,6	12,5	21,1	20,0	25,0	22,1	12,5
The spread of crime, alcoholism, narcotism	42,1	36,3	43,8	47,4	24,0	25,0	36,4	62,5
Lack of community entrepreneurship	34,2	34,3	12,5	18,4	16,0	50,0	22,1	12,5
Lack of investment	44,7	55,9	6,3	44,7	40,0	50,0	41,6	25,0
Low quality (lack of) road pavement between settlements of the village council	65,8	62,7	43,8	50,0	32,0	50,0	51,9	12,5
Depreciation of engineering networks (water supply, water disposal)	47,4	48,0	37,5	36,8	32,0	75,0	32,5	37,5
A significant part of the population of older working age	26,3	30,4	12,5	34,2	32,0	50,0	35,1	37,5
Poor quality of preschool education	7,9	14,7	6,3	10,5	16,0	50,0	10,4	0,0
Low quality of secondary education	10,5	13,7	12,5	7,9	12,0	50,0	6,5	0,0
Lack of a developed network of a trade network's development	10,5	18,6	12,5	10,5	12,0	0,0	11,7	0,0
Lack of a public service institutions' development	13,2	27,5	6,3	10,5	20,0	0,0	24,7	0,0
Inadequate quality of care	42,1	46,1	6,3	28,9	32,0	50,0	26,0	12,5

*source: own research authors

The analysis of answers to the question about the main resource of community development is given in Table 7.

Table 7. Demographic and socio-economic differences in estimation of the primary community development resource

Characteristics of respondents	Percentage of answers, % to respondents								
	Minerals in the community	Free land in the community	Advantageous geographical position	attractive nature	Free business premises	Interesting tourist sites	Activity / entrepreneurial community residents	Local businesses and entrepreneurs	Progressive and effective local government
Age of respondents, years:									
< 35	3,1	24,5	5,1	24,5	2,0	6,1	14,3	8,2	12,2
35-60	5,1	22,3	1,9	15,9	4,5	7,6	8,9	10,8	22,9
over 60	3,9	11,8	3,9	25,5	5,9	7,8	13,7	21,6	5,9
Level of education									
secondary education	3,8	23,7	3,1	16,8	3,8	5,3	12,2	14,5	16,8
secondary vocational	2,6	22,1	2,6	22,1	2,6	10,4	13,0	11,7	13,0
incomplete higher	6,3	9,4	6,3	21,9	9,4	0,0	3,1	15,6	28,1
higher	6,6	19,7	3,3	23,0	3,3	11,5	11,5	6,6	14,8
not specified	0,0	33,3	0,0	33,3	0,0	0,0	16,7	0,0	16,7
Employment (Kind of activity)									
employee	5,3	18,4	5,3	13,2	0,0	2,6	15,8	13,2	26,3
budget sphere	4,2	26,0	2,1	15,6	3,1	7,3	13,5	9,4	18,8
student	4,0	8,0	8,0	40,0	4,0	8,0	12,0	8,0	8,0
unemployed	4,8	31,0	2,4	19,0	9,5	9,5	7,1	9,5	7,1
self-employment, personal business	4,0	36,0	0,0	24,0	0,0	8,0	0,0	8,0	20,0
own business (entrepreneur)	0,0	66,7	0,0	0,0	33,3	0,0	0,0	0,0	0,0
pensioner	4,2	8,3	4,2	25,0	4,2	5,6	12,5	18,1	18,1
not specified	0,0	0,0	0,0	0,0	0,0	40,0	20,0	40,0	0,0
Income level, UAH / month									
< 3000	4,8	17,9	3,6	25,0	2,4	7,1	8,3	14,3	16,7
3000-5000	4,4	26,5	4,4	13,2	4,4	8,8	16,2	5,9	17,6
5000-7000	8,7	17,4	0,0	13,0	4,3	0,0	13,0	4,3	39,1
More 7000	0,0	0,0	0,0	33,3	0,0	0,0	0,0	33,3	33,3
not specified	0,0	29,5	2,3	15,9	9,1	9,1	15,9	13,6	2,3
Average	4,2	21,2	3,3	20,2	3,9	7,2	11,4	12,1	16,6

*source: own research authors

On the whole, the population is more focused on finding an external resource - most of the answers were received by available natural resources (more than 40%) and progressive and efficient local authorities (16,6%). Only one out of nine respondents realized that the main resource of development is the inhabitants themselves, their activity

and enterprisingness. This is the least understood by middle-aged people, with incomplete higher education, self-employed and unemployed, and those with low incomes.

The priority of individual areas of community development is given in Table 8.

Table 8. Demographic and socioeconomic differences assess UTC's development projects as "the most important" (Question: "Which projects of socio-economic development should be a priority?")

Characteristics of respondents	Percentage of answers, % to respondents							
	Socio-cultural and environmental direction				Economic direction			
	Development of a park zone, playgrounds	Restoration of historical and cultural heritage	Creating a zone of "green tourism" and eco-settlements	Average	Creating a multi-utility company	Creation of a dairy cooperative	Creation of processing enterprises	Average
1	2	3	4	5	6	7	8	9
Age of respondents, years								
< 35	63,2	24,2	42,5	43,5	55,4	79,7	80,0	72,6
35-60	47,5	23,4	54,1	42,5	48,6	76,9	76,6	67,9
over 60	50,0	37,0	53,8	46,9	67,9	72,4	86,7	75,9
Level of education								
secondary education	55,1	23,6	47,2	42,7	49,4	78,7	78,0	69,3
secondary vocational	42,6	28,9	54,0	42,3	53,2	76,4	85,5	72,6
incomplete higher	58,3	23,8	56,5	47,1	60,0	79,2	75,0	71,2
higher	55,8	25,6	48,8	43,4	57,1	74,5	78,3	70,5
not specified	75,0	50,0	40,0	53,8	66,7	80,0	60,0	69,2
Employment (Kind of activity)								
employee	51,7	34,5	66,7	51,1	60,0	76,5	75,0	70,8
budget sphere	58,5	22,1	32,9	38,2	51,3	76,5	78,8	69,3
student	66,7	28,6	61,5	55,2	42,9	75,0	69,2	65,6
unemployed	31,8	23,8	56,0	38,2	50,0	82,8	79,2	72,0
self-employment, personal business	63,6	10,0	70,6	52,6	36,4	76,5	73,3	65,1
own business (entrepreneur)	33,3	33,3	33,3	33,3	33,3	100,0	100,0	77,8
pensioner	45,9	32,4	57,5	45,6	54,8	76,1	85,7	72,3
not specified	100,0	0,0	33,3	57,1	100,0	100,0	100,0	100,0
Income level, UAH / month								
< 3000	51,6	28,7	50,5	44,2	56,9	77,2	79,3	71,6
3000-5000	55,2	25,9	35,0	38,6	50,9	74,6	80,4	68,8
5000-7000	52,4	22,7	45,0	39,7	45,0	81,0	77,3	68,3
More 7000	66,7	0,0	100,0	55,6	33,3	66,7	66,7	55,6
not specified	50,0	33,3	80,8	59,3	56,3	82,1	80,0	75,0
Average	**53,1**	**25,9**	**48,8**	**43,1**	**56,5**	**76,4**	**79,2**	**71,0**

*source: own research authors

On the whole, the population of the community gives more priority to the economic directions of development towards social, cultural and environmental projects. The level of education had little effect on respondents' assessments. At the same time, the social status of respondents has a significant influence on the results obtained. More than half of the interviewed hired workers, students and self-employed evaluated the "the most important" projects of the socio-cultural and ecological direction (against less than 40% of employees in the fiscal sector and the unemployed). The assessment of pensioners is generally on average.

The faith of the population in the realization of community development projects is presented in Table 9.

Table 9. Demographic and socioeconomic differences assess the reality of the implementation of the tasks of UTC's development (Question: "Do you believe in the reality of the tasks' implementation on the priority UTC's development")

Characteristics of respondents	Positive estimates, % of the total number of respondent			Negative estimates, % of the total number of respondent		
	«Yes»	«Rather yes»	Total	«No»	«Rather no»	Total
1	2	3	4	5	6	7
Age of respondents, years						
< 35	21,7	15,7	37,3	44,6	18,1	62,7
35-60	24,6	14,8	39,4	45,1	15,5	60,6
over 60	22,4	28,6	51,0	38,8	10,2	49,0
Level of education						
secondary education	26,3	19,3	45,6	45,6	8,8	54,4
secondary vocational	27,5	15,9	43,5	33,3	23,2	56,5
incomplete higher	24,1	17,2	41,4	48,3	10,3	58,6
higher	10,9	14,5	25,5	52,7	21,8	74,5
not specified	28,6	28,6	57,1	28,6	14,3	42,9
Employment (Kind of activity)						
employee	32,4	20,6	52,9	32,4	14,7	47,1
budget sphere	14,9	12,8	27,7	55,3	17,0	72,3
student	53,3	6,7	60,0	13,3	26,7	40,0
unemployed	30,3	15,2	45,5	36,4	18,2	54,5
self-employment, personal business	9,1	13,6	22,7	63,6	13,6	77,3
own business (entrepreneur)	0,0	50,0	50,0	0,0	50,0	50,0
pensioner	21,7	26,1	47,8	42,0	10,1	52,2
not specified	80,0	20,0	100,0	0,0	0,0	0,0

Continuation of table 9

1	2	3	4	5	6	7
Income level, UAH / month						
< 3000	23,9	17,4	41,3	45,8	12,9	58,7
3000-5000	20,0	13,8	33,8	49,2	16,9	66,2
5000-7000	13,6	22,7	36,4	59,1	4,5	63,6
More 7000	0,0	0,0	0,0	50,0	50,0	100,0
not specified	36,7	23,3	60,0	10,0	30,0	40,0
Average	**23,4**	**17,5**	**40,9**	**43,8**	**15,3**	**59,1**

*source: own research authors

In general, only 40,9% believe in the possibility of implementing the tasks of community development. The pattern of growth of optimism with the age of the respondents is traced. Oddly enough, the most optimistic were pensioners – 51,0%. The level of education, on the contrary, showed a reverse trend: the growth of education leads to a decrease in optimistic moods. The sharp decrease in optimists among respondents with higher education may be due to a clearer awareness of the difficulties in implementing community development objectives. In the context of the social status of the respondents, the most pessimistic were the public sector workers and the self-employed in the personal sector. The level of optimism decreases with the growth of the level of income received. This is due to a certain correlation between the level of education and the level of income received.

At the same time, the low optimism of the population is combined with a rather high willingness to take an active part in the implementation of community development tasks (Table 10).

Table 10. Demographic and socioeconomic differences of readiness to take an active part in the implementation of the UTC's development (Question: "Are you ready to take an active part in the implementation of socio-economic community development projects"

Characteristics of respondents	Positive estimates, % of the total number of respondent			Negative estimates, % of the total number of respondent		
	«Yes»	«Rather yes»	Total	«No»	«Rather no»	Total
1	2	3	4	5	6	7
Age of respondents, years						
< 35	52,3	36,0	88,4	5,8	5,8	11,6
35-60	41,6	37,0	78,6	14,9	6,5	21,4
over 60	40,8	34,7	75,5	20,4	4,1	24,5
Level of education						
secondary education	47,2	34,1	81,3	15,4	3,3	18,7
secondary vocational	44,4	29,2	73,6	13,9	12,5	26,4
incomplete higher	35,5	35,5	71,0	19,4	9,7	29,0
higher	42,9	53,6	96,4	1,8	1,8	3,6
not specified	57,1	14,3	71,4	28,6	0,0	28,6

Continuation of table 10

1	2	3	4	5	6	7
Employment (Kind of activity)						
employee	39,5	44,7	84,2	13,2	2,6	15,8
budget sphere	46,4	40,2	86,6	9,3	4,1	13,4
student	46,7	20,0	66,7	13,3	20,0	33,3
unemployed	44,4	36,1	80,6	8,3	11,1	19,4
self-employment, personal business	45,5	36,4	81,8	9,1	9,1	18,2
own business (entrepreneur)	33,3	33,3	66,7	33,3	0,0	33,3
pensioner	41,1	32,9	74,0	21,9	4,1	26,0
not specified	100,0	0,0	100,0	0,0	0,0	0,0
Income level, UAH / month						
< 3000	45,3	32,3	77,6	16,8	5,6	22,4
3000-5000	44,9	39,1	84,1	11,6	4,3	15,9
5000-7000	37,5	62,5	100,0	0,0	0,0	0,0
More 7000	66,7	33,3	100,0	0,0	0,0	0,0
not specified	43,8	31,3	75,0	9,4	15,6	25,0
Average	**44,6**	**36,3**	**81,0**	**13,1**	**5,9**	**19,0**

*source: own research authors

More than 80% are ready to active participation in the implementation of the objectives of UTC's development, and the youth are more willing to do so. With age, readiness to participate actively decreases. An ambiguous trend is the influence of respondents' level of education. An increase in the level of education first shows a decrease in the number of those willing to participate actively in transformations, but already among those who have a complete higher education, almost all (96,4%) demonstrate readiness to do so. The effect of the level of income received, whose growth correlates with increasing readiness to active work for the benefit of society, demonstrates a rather clear tendency. Quite unexpected results showed an analysis of the influence of social status. The most passive were theoretically the most dynamic social groups - students and businessmen - one third of whom turned out to be unprepared to do something to implement community development projects.

The results' analysis of the Znob-Novgorod UTC's population sociological survey showed the existence of the demographic and socio-economic factors' influence on the determination of the priority directions of society development and the willingness to take an active part in their implementation. The results of the analysis are quite logical, but some of them, due to their ambiguity, require further research in other territorial communities that have similar conditions and problems of existence.

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THE JUSTIFICATION OF THE MECHANISM FOR INNOVATIVE PROVISION OF SUSTAINABLE RURAL DEVELOPMENT

Kharchenko Tetyana,
Candidate of Economic Sciences, Senior Lecturer
Sumy National Agricultural University, Sumy, Ukraine

Deepening integration processes in the rural development management system leads to the search for new approaches and tools to ensure their sustainable development. At the same time, one of the key elements of achievement of development efficiency, which requires adjustment of the existing management mechanisms, is related to the extension of powers of local authorities on the ground. At the same time, another key aspect is the strengthening of requirements for quality characteristics of sustainable rural development in line with European standards.

The complexity of the justification of the mechanism for sustainable development of rural territories is due to the need to take into account its three components: economic, social and environmental. On the one hand, economic development is a key element in the sustainable development of rural territories, since the lack of a financial base significantly reduces the opportunities for social and environmental development. However, without the prospects of developing social and environmental components, it is not possible to achieve the complexity of sustainable rural development. It is from the point of view of effective economic development that the development of innovative activity of agricultural enterprises is promising.

Current trends in the development of rural areas from the standpoint of agricultural producers impede the development of social and environmental components. However, in the context of the current decentralization changes, approaches regarding financing of infrastructure facilities are gradually being formed under the condition of tripartite financing: the funds of the regional budget, the funds of the united territorial community and the funds of agricultural producers. Of course, in the context of the sustainable development of rural areas, it is important to develop the individual farms, but given the current state of their development, it is possible to plan only in the long term. So, now, a key aspect of medium-term sustainable rural development is the dynamics of financial security, which in today's decentralized transformations creates opportunities for growth, including by increasing tax revenues from the activities of agricultural enterprises operating in rural areas.

On the other hand, the introduction of an innovative component into the activities of agricultural enterprises will have a multiplier effect, both in terms of economic and environmental and social development. In addition, the implementation of the partial budget financing approach under the programs to support the innovative development of domestic farmers operating in rural areas can be improved. In this context, it is advisable to consider funding innovative local development programs in two phases under different support conditions, namely: the first phase of funding will be provided on a non-recurring basis (if necessary) and the second stage on a recurrent basis.

Such division of financing allows to take into account the influence of the results of innovative activity on the financial and economic activity of an agricultural enterprise, conditioned by the current economic situation in the country and the specificity of innovative activity, which in the implementation of innovations determines the possibility of occurrence for a certain period of time, namely, between the beginning of the realization period economic effect, deterioration of economic activity. Considering that experts estimate that the duration of such a period can range from 0,5 to 24 months in such a period, the decline in production can lead to a sharp deterioration in the financial condition of agricultural enterprises. In developed economies, one of the ways to resolve this issue is to create a stabilization fund as an integral part of investment, the funds of which are used to compensate for the temporary deterioration of the financial and economic condition of the enterprise [1, p. 12].

For most agricultural enterprises, this approach is not acceptable, since for the period 2016-2018, the share of enterprises that cannot rely on investor support (with low financial and economic readiness to innovate and with insufficient financial and economic readiness to innovate activity) ranged from 46% to 56.1%. Therefore, it is suggested that when developing local innovative development programs, consideration should be given to providing financial support to agricultural enterprises located in the community concerned on an irrevocable basis, which will be the first and foremost funding. It is the state support that will enable agricultural enterprises with low financial and economic readiness to innovate to increase the profitability of production as a result of the likely economic impact of innovations.

In order to conduct in-depth empirical research on this issue, a survey was conducted of representatives of the united territorial communities and village councils, who attended seminars at the Sumy National Agrarian University in 2018-2019 years and received Master's degree in Regional Management. The questionnaire was attended by the heads of the united territorial communities and village councils or their representatives, in general, representatives of all eighteen districts of the region were interviewed. The total number of respondents was 365 people, it should be noted that the survey was conducted anonymously.

According to the results of the survey, it was found that 67,1% of respondents indicated the need to innovate in agricultural enterprises, 95,0% of respondents have information about the state of affairs of agricultural enterprises operating in their communities; 80,8% of the survey respondents believe that state support significantly influences the activation of innovative activity in agricultural enterprises; 72,9% of respondents believe that it is possible to support innovative activity at agricultural enterprises on a non-refundable basis; 77,5% of the respondents supported program-targeted financing as a means of state support of innovative activity in agricultural enterprises; 52,1% of respondents agreed to adopt local programs for innovative development of agricultural enterprises; among the possible sources of financing innovations for agricultural enterprises, 60,0% of respondents preferred state budget funds, 47,1% to regional budget funds, 34,8% to district budgets, and 26.6% to rural and settlement councils.

In the course of the survey, various indicators were proposed that could not be reduced to a single criterion, so we used the method of analytical hierarchy process (AHP) to analyze these indicators and decide on the feasibility of further research in this direction.

The choice of this method is due to the fact that it can be used to justify the solution of poorly structured and unstructured problems [2, p. 205]. The methodology for solving such problems is based on a systematic approach in which the problem is considered as a result of the interaction of its constituents and, moreover, the interdependence of many heterogeneous objects and not simply as their isolated and autonomous set [3, p. 195].

One of the advantages of the hierarchy analysis method is the ability to validate information obtained from a decision maker or expert for consistency using the consistency index for both individual matrices and for the entire hierarchy. Some correlation between the variants of the decisions in this method is clear on the basis of information obtained from the decision maker or experts. Thus, the analysis of the weight of objects on the descending levels of the hierarchy makes it possible to understand how one or another value of weight is acquired. Thus, using the method of analysis of hierarchies, we can scientifically justify the adoption of a decision [4, p. 203-204].

Interviewing the heads of the united territorial communities and village councils, in particular, the key issues were identified, which characterize their attitude to the adoption of targeted programs of innovative development of agricultural enterprises, possible sources of financing innovations at agricultural enterprises, factors limiting the financing of innovation activities from budgetary funds. All of the above mentioned issues were related to the introduction of innovations in agricultural enterprises at the expense of budgetary funds, but all of them are different in nature and cannot be brought to a single criterion. To confirm the possibility of financing innovative activities in agricultural enterprises at the expense of budgetary means and using the results of questionnaires, we use the Decision Support System (DSS), which combines the experience and informal knowledge of the decision maker and mathematical research.

The survey, conducted directly by the results of the questionnaire of the heads of the united territorial communities and village councils, most probable were four alternative sources of financing of innovative activity: state budget, regional budget, district budget and local budgets (which include the budgets of the united territorial communities, budgets of village and village councils).

In the first stage of applying the method of hierarchy analysis, as a result of the joint work of the editor of hierarchies and the decision maker (in our study - expert), a hierarchy will be generated to choose the source of funding for innovation. The expert commission included specialists who have information about the factors that influence the development of innovation activity in agricultural enterprises of Sumy region (including restraining) and the possibility of financing innovation activity from budgets of all levels.

Taking into account the peculiarities of each of the proposed sources of financing for innovation activities, the expert commission should evaluate them according to certain criteria and degree of importance in relation to each other, which is more important and less important when choosing the source of financing for innovation. This can be done by filling the tables by the method of paired comparisons using the scale of relative importance, which is the second stage of the method of analysis of hierarchies. As a result of processing these tables we obtain eigenvectors that determine the weights of the corresponding arcs. The dimension of the criterion score table is determined by the number of arcs that enter this vertex.

We then compare the alternatives by each of the following criteria:"limited funding", "non-repayable financing" and " dependence on changes in legislation". To do this, we construct matrices of pair wise comparisons with 4x4 dimensions for each criterion. These matrices reflect the opinions of experts on what priorities, by each criterion, have alternatives - sources of funding for innovation.

Once all the project hierarchies are properly constructed and all connections are established, calculations must be performed. The result of the third step of applying the hierarchy (synthesis) method is to determine the weights of the criteria and alternatives (for instance: the proposed sources of funding). The calculations will show which of the alternatives is most preferred, taking into account all the above criteria.

The first alternative, namely the state budget, received the largest weight of 0,424. The second largest alternative is the regional budget, since its weight was 0,315. At a certain distance from the first two sources of funding, weighing 0,145 and 0,116, respectively, are the other two sources - the district budget and local budgets, the obtained values of which indicate the guiding nature of the action of these alternatives.

Based on the results of the calculations, we can conclude that when carrying out innovative activities in agricultural enterprises, professionals are faced with the need to process a large amount of information and take into account diverse indicators that can't be represented as a single criterion. The weighted values of the proposed alternatives indicate that innovation from only one of the proposed sources is insufficient. The most optimal ratio for financing innovative activities is the use of budgets of all levels, with all the funds allocated at the regional level (regional, district, local), if combined, will outweigh the importance of public funds, which indicates the importance of developing targeted regional programs innovative development.

It is proved that innovation support of sustainable development of rural territories of Sumy region requires budget financing of all levels. In order to implement financing from the state budget, regional, district and local budgets, it is necessary to develop targeted programs of innovative development that would be consistent with the current program of rural development of Sumy.

The implementation of this approach can be implemented in the context of current decentralization changes through regional and local innovation development programs. After all, in Art. 6 of the Law of Ukraine "On Innovation Activity" stipulates that state

regulation of innovation activity can be implemented through "formation and implementation of state, sectoral, regional and local innovation programs" [5].

Pursuant to Article 10 of the Law, regional, district and local councils approve regional programs of the appropriate level and determine the sources of financial support for such programs from regional, district and local funds. Financial support for regional and local innovation programs is provided by state innovative financial-credit institutions (their regional offices) within the limits of the funds provided by regional, district and local budgets [5].

Financing of regional programs of innovative development at the expense of other items of budgetary funds is possible in case of their relation to strategic priority directions of innovative activity for 2011-2021, which are defined by Art. 4 of the Law of Ukraine "On Priority Areas of Innovative Activity in Ukraine"[6]. It should be noted that one of these areas is technological modernization and development of the agro-industrial complex.

Therefore, one of the possible ways to implement such support is through program-targeted financing through regional programs to support innovative development of agricultural enterprises. The general concept of "regional program" includes both regional and district programs and local programs, since the legal bases for the development; approval and implementation of these programs are regulated identically by one piece of legislation.

In forming the ratio of sources of financing for innovative development programs in Sumy region, we will use previously calculated results, namely: state budget funds – 42,4%, regional budget funds – 31,5%, district budget funds – 14,5% and local budgets - 11,6%. In the case of budget constraints, financing of an innovative project may involve the own funds of agricultural enterprises, the minimum amount of which can be calculated as the difference between the cost of this project and the total amount of financing from the above sources by the formula (1):

$$\text{Own cost} = \text{Project cost} - S, \quad (1)$$

where S is the total amount of financing from the budget funds, formed in accordance with the results of research in the ratio: 0,424 S - funds of the state budget; 0,315 S - funds of the regional budget; 0,145 S - funds of the district budget; 0,116 S - local budget funds.

When implementing regional programs of innovative development for agricultural enterprises with low level of financial and economic readiness, only those innovative projects will be implemented that meet the priority areas of innovative activity in Ukraine, namely technological upgrading and development of agro-industrial complex. The importance of technological re-equipment of agriculture is also emphasized in the draft Concept of a comprehensive state program of reforms and development of agriculture of Ukraine: "Achieving the goals of this program in the context of certain global trends and challenges, as well as features of the state of Ukraine, its economy and national economy is possible only with provided the transition of key system-forming sectors of agriculture to the latest energy and resource-saving technologies that can

create the opportunity agricultural enterprises to have profitable production when selling manufactured products at competitive prices"[7].

The economic relations that emerge in the process of innovations in agricultural enterprises require appropriate knowledge and information. Intensification of innovation processes, development of information technologies and systems significantly reduce the time for gathering and processing information, there is a transition from hierarchical to network management structures, integration of research methods, dominance of information communications [8, p. 25], which allows you to explore all possible variants of the relationships of a certain population and to choose the best one.

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INSTITUTIONAL ASPECTS OF ENSURING POPULATION GUARANTEES OF ACCESS TO EDUCATION IN THE CONTEXT OF IMPLEMENTING ADMINISTRATIVE-TERRITORIAL REFORM

Hrytsenko Viktoriia, PhD in Economics,
teacher-methodologist,
College of Sumy National Agrarian University
Kirichenko Tatyana, PhD in Economics, Senior Lecturer,
Sumy National Agrarian University

One of the urgent problems of managing the territory amalgamated hromadas (communities) (TAH) development is the lack of a well-established policy, the fundamental incompleteness of existing theories of management, which find themselves at the initial stage of the formation. The managers do not have the relevant experience and knowledge regarding the perspective and strategic planning. They work in the uncertain conditions, when some of the reforms are not completed.

Human resources are essentials to form TAH as a unit, which will operate and have sustainable development. At the same time, HR is a source of development and service customer of TAH.

The development and preservation of human potential depends on investments in education. The necessary components of this process are:

a) To ensure the availability of quality pre-school, extra-curricular, general secondary and special education, vocational and higher education for children from rural areas;

b) Provision of employment on the territory of the TAH, which includes lifelong learning; ensuring the ability to diverse skills for employment in the conditions of the rapid changes;

c) Providing opportunities for healthy lifestyles through the creation of sports training facilities for children and adults aiming to preserve their physical health;

d) Providing opportunities for self- realization in the cultural field for children of all ages and adults.

Besides, there are problems in other areas that directly affect the living conditions of people. They are: conservation of natural resource potential; entrepreneurship development; medical service quality; infrastructure development and others.

The institutional environment in the field of education forms a set of normative documents, which deal with various aspects in this field. It defines the powers of state bodies and TAH (communities), the rights and responsibilities of participants of the educational process. Among the existing set of legislative acts in the context of decentralization in order to protect the rights and guarantees of the population regarding the access to education, the following laws should be noted:

1. Law of Ukraine «On Education» dated September 5, 2017 No. 2145-VII [1], which defines the competence of local governments in the field of education,

along with the competences of public authorities in the implementation of human rights to education.

2. Law of Ukraine «On Local Self-Government in Ukraine» dated May 21, 1997 No. 280/97-BP [2] - a special legislative act in the field of local self - government, which determines the legal status of local self-government bodies and their powers in the field of education in particular.

3. Besides the aforementioned legislative acts, the powers of local self-government bodies in the field of education are also defined by the Laws of Ukraine «On General Secondary Education» dated May 13, 1999 No. 651-XIV [3] (the local self-government bodies are defined as governing bodies of the general secondary education system) and the Law «On Preschool Education» [4] dated August 11, 2001 No. 2628-III.

4. Law of Ukraine of June «On Extracurricular Education» dated June 22, 2000 No. 1841-III [5] defines public policy and legal relationships in the field of extracurricular education.

According to the Art. 32 of the Law of Ukraine «On Local Self-Government» the own (self-governing) powers include the powers in the field of education, culture, physical culture and sports. The own (self-governing) powers also include:

1) management of educational, cultural, physical education and sports institutions, organization of their logistical and financial support;

2) ensuring the getting of general secondary and vocational education in the state and communal educational institutions, vocational schools;

ensuring the getting of higher education in the communal higher education institutions;

creating the necessary conditions for the children and youth upbringing, the development of their professional abilities, vocational training;

promoting the activities of preschool and extracurricular educational institutions, children's, youth, scientific and educational organizations;

3) resolving the issues concerning the use of premises for the workshops, studios and laboratories necessary for their creative activity. The use of the premises should be conducted on the base of the preferential terms.

4) creating the conditions for the development of culture, promoting the revival of traditional folk art centers, national and cultural traditions, arts and crafts;

5) promoting the work of creative unions, national-cultural societies, associations, other public and non-profit organizations which deal in different spheres (culture, physical training and sports, youth activity);

6) creation of conditions for physical training and sports in the residential areas and parks;

The delegated powers include:

1) ensuring (within the limits of the granted powers) the availability and free of charge education in the correspondent area,

2) ensuring (in accordance with the law) the development of all types of education;

the network development and improvement of educational institutions of all forms of ownership;

physical culture and sports development;

the need, order, determination and formation of the personnel for these institutions;

the conclusion of contracts for training specialists;

the work concerning the personnel qualification improvement;

employers' involvement into the solving the question which concerns the training of the vocational schools students;

3) providing assistance in employment for graduates of general or vocational schools of state or communal ownership;

4) provision of orphans, children with disabilities / persons with disabilities of the I-III groups, children deprived of parental care and children from families which get social assistance according to the Law of Ukraine "On State Social Assistance to Low-Income Families" who study in state and municipal educational institutions. They are provided with free textbooks. The suitable conditions for self-education are created for them.

5) organizing of work to prevent the child neglect;

6) resolving the issues concerning the state maintenance of orphans and children who are left without parental care at boarding schools, orphanages, including family-type orphanages, vocational schools and state retention of those who have physical or mental disabilities and cannot study in educational establishments and in special educational institutions;

resolving the issues concerning providing citizens with privileges for the maintenance of children in boarding schools (and pre-schools);

resolving the issues concerning the meals payment for children in schools (extended day groups);

7) resolving the issues of providing minors, pupils, students, pensioners and persons with disabilities the right to use the objects of culture, physical education and sports free of charge;

determining the procedure for compensation of the services, which were provided free of charge or on preferential terms to these institutions;

8) ensuring the protection of historical and cultural monuments, preservation and use of cultural heritage.

All of these functions are related to investing in the education of people living on the territory of the TAN. The education is considered as an investment in human capital.

As at June 1, 2019, 36 communities have been created in Sumy region, five of which have not held the first elections [6].

Among the created communities, 8 local/regional, 11 township and 17 village communities were formed with an average population of 56534 ppl., 7935 ppl. and 4874 ppl. respectively. In Buryn, Velykopysarivka, Romny, Seredyno-Buda, Shostka and Yampil districts, only one regional or village community was created respectively. It proofs that the population living in rural areas is not sufficiently aware of the possibilities and prospects of such communities. No one community

was created in Lebedyn district. All the above-mentioned facts prove the need of further legal, educational and other assistance in such regions.

In order to ensure a unified approach to the formation of administrative processes and structures, the Methodological Recommendations for the development of the provision on the structural unit of education of the executive body of the TAH (community) were published by MES, Letter No. 1 / 9-633 dated December 30, 2015 [7].

The Methodological Recommendations emphasize that there is a need to maintain the vertical power in the fulfillment of educational authorities and tasks of the existing and created educational management bodies (Ministry - education management bodies of regional state administrations - administrative bodies of district, city (regional in cities), territory amalgamated hromadas (communities) – educational establishment).

One of the significant managerial powers, which is granted to local self-government bodies is the right to form their own and effective system of providing educational services to the members of their community.

If we take into account the social importance of the education sector and the dominant amount of budget expenditures on the TAH (communities) running, we can state that this task is considered to be of the highest priority for TAN authorities.

According to the Law of Ukraine "On General Secondary Education", local self-government bodies ***create the conditions for citizens to obtain a comprehensive general secondary education.*** Therefore, they form an optimal network for providing qualified, competent and affordable educational services. TAHs receive an educational subsidy to provide benefits for the educational establishment employees [8]. The lack of such educational subsidy for salaries can be observed in the case of lower actual number of pupils in the class in comparison with the estimated one.

In such cases, the pedagogical workers are charged the minimum allowances provided for by the legislative acts. There is no possibility of incentives accruing. Local self-government bodies use money from their local budgets to pay salaries for the teaching staff, rather than investing in community development.

In other words, this index of the financial capacity of a school-based TAH educational network shows communities how their real-life network complies with the state-funded model.

There is no dependency between the community type and financial capacity index. Negative index included regional, township and village communities. If such communities do not have enough educational subsidy, then they lack of their own funds for the development of other educational institutions, in particular no attention is paid to out-of-school education and sports. Table 1 shows that there are only three institutions of school education and two sport centers in communities that have existed since 2016. This situation leads to a decrease in opportunities for mental and physical development of children, their self-realization.

The financial capacity index of 50% of TAHs (communities) created by 2017 is less than 0. We can make the conclusion that over the years, communities have

not been able to set up a structure of educational institutions that would effectively use the budget costs in demographic crisis conditions. These crisis conditions have a tendency of escalation.

Table 1. Children's and educational institutions in TAH of Sumy region

TAH of Sumy region, created before 2017	Children's and educational institutions at the date of community creation						
	I-III levels Schools	I-II levels Schools	I level Schools	Kindergartens	Out-of- school institutions	Cultural institutions	PT Institutions
Bezdryk village TAH	2	0	0	2	0	4	1
Berezivka village TAH	3	3	0	6	0	9	0
Boromlia village TAH	2	0	0	1	1	3	1
Hrun village TAH	4	1	0	4	0	12	0
Druzhba Local town TAH	2	1	0	3	0	9	0
Znob-Novgorodske township TAH	4	2	2	1	0	27	0
Kyrykivka township TAH	5	0	0	6	0	15	0
Mykolaiivka village TAH	2	1	0	1	1	10	0
The Mykolaiivka township TAH	7	2	0	3	0	25	0
Myropilia village TAH	2	2	0	1	0	15	0
Nedrihailiv township TAH	3	2	0	6	1	17	0
Nyzhnia Syrovatka Village TAH	2	0	0	2	0	5	0
Khotyn township TAH	1	1	1	3	0	11	0
Shalyhyno Township TAH	3	1	0	1	0	11	0
Total	42	16	3	40	3	173	2

Source: https://decentralization.gov.ua/

Under given circumstances, there appear to be a number of questions. They are: what groups of people do really need training, what forms of training are expedient to use by TAH for training of different groups of people and what mechanisms can be used for this training.

In the context of rapid social changes, technologies development and demographic changes, the following age and social groups (which require training) should be identified:

- Kids and teens. The children of preschool age, schoolchildren and students will be included in this group. This age group is in need of comprehensive development and development of such skills that will help them to train constantly

and change their skills, expand their knowledge throughout the life and develop the healthy lifestyle habits. All these issues require the kindergartens, schools, sports and culture extra-curricular facilities and secondary specialized educational institutions of certain quality and number.

- Employed population (people of different age groups who have a job). This group of people needs the continuous improvement of learning skills to enhance the results of their work. In conditions of constant competitive environment, the regular personnel training is an integral part of the production process;
- Unemployed population (people of working age who do not have a permanent job). This group of people may be in need for retraining or getting additional skills to the acquired ones, which enable people to find the job in the case of necessity.
- Vulnerable groups of population (certain social groups: people with disabilities, the elderly, etc.). This group requires the constant support and care from local state authorities. It can be realized through the training and gaining the certain skills, which will help them in the employment and in becoming socially integrated people.

Due to the fact, that everyone has the right to rest, which helps people to work more effectively for a long period of life, every member of society should be able to express himself through sports, cultural life, and hobbies. Therefore, there is a need to create the appropriate living conditions for residents in the TAH.

Using the statistical forecast of the State Employment Service, it is possible to analyze what areas of activity should the attention be paid to while retraining or vocational guidance of the population living within TAH (Table 2).

Table 2. Number of vacancies (according to CTEA), thousand units [9]

Type of economic activity	2019 (forecast)	Structure, %
1	2	3
Ukraine	**1158,8**	**100,0**
Processing industry (manufacturing)	245,8	21.2
Wholesale and retail trade	183,1	15.8
Agriculture, forestry and fisheries	168,0	14.5
Public administration and defense; compulsory social insurance	83,4	7.2
Education	81,1	7.0
Transport, warehousing, postal and courier activities	73,0	6,3
Health care and social assistance	68,4	5.9
Building	44,0	3.8
Administrative and support service activities	33.6	2.9
Temporary accommodation and catering	33,7	2.9
Supply of electricity, gas, steam and air conditioning	32,4	2.8
Water supply; sewerage, waste management	22,0	1.9
Professional, scientific and technical activities	20.9	1.8
Mining and quarrying	18.5	1.6
Real estate operations	12.7	1.1

Continuation of table 2

1	2	3
Arts, sports, entertainment and recreation	10.4	0.9
Financial and insurance activities	10.4	0.9
Other services	9.3	0.8
Information and telecommunications	8.1	0.7

As we can see, the specialists are required in the certain fields in rural areas. These fields are: wholesale and retail trade, education, agriculture, health care, water supply, sewerage and waste management. The specialists in certain professions and specialties are required in Sumy region. (Fig. 1) The professions are the following: drivers of vehicles, part-time workers, shop assistants. In our opinion, the training or retraining of such specialists is not a complicated matter and does not require a special power. That is why it is possible to organize such a process.

Professions	Number of people
Driver	2012
Maintenance worker	1532
Seller of foodstuff	1111
Tractor - driver (agricultural production)	1035
Plumber	605
Accountant	601
Cook	556
Tractor operator	478
Watchman (guard)	456
Stoker (watertender)	453
Loader	385
Forestry worker	361
Packer	332
Nurse	285
Electrical Engineer	257
Boiler operator	252
Tailor	248
Welder	224
Lathe operator	162
Shoe Top Handler	123

Fig. 1. Top vacancies in 2019 in Sumy region, persons [10]

The occupations of tractor driver, plumber, cook, tractor operator require more skills and experience. The youth should be targeted in mastering these specialties at the initial steps of their career choice.

There is also a need for accountants and nurses in the labor market. These professions are considered to be more complicated but low paid in comparison with the above-mentioned ones. The statistical data of the State Employment Service confirm the information about the level of average wages in these fields (Fig. 2).

As we can see, there is a certain correlation between the salary level and the number of vacancies. The lower the level of the offered salary, the greater the number of vacancies in this field.

This number of job vacancies in these areas is mainly caused by the workforce migration (skilled workers in the certain field) which refers to the better-paid job seeking.

Professions	Average salary, hrn
Agricultural workers	5199
Low skilled professions	5233
Trade and service workers	5566
Technical Employees	5596
Specialists	5631
Professionals/Highly qualified specialists	5985
Maintenance workers	6779
Qualified employees with tools	6917
Lawyers, state servants, executives	7055

Fig. 2. Average salary level in Ukraine for the vacancies offered in January - April 2019 [11]

Massive labor migration abroad is also identified as a major trend in the Ukrainian labor market [12]. According to some estimations, more than 1 million of Ukrainian people work in Poland. Even today, we can feel the lack of labor resources. The economic growth is impossible without solving this issue.

This situation acknowledges the fact that people who remain in their native country are in need for knowledge and skills improvement. The training and the improvement of people's skills and knowledge can be held in different ways:

- Enhancing job seeking skills;
- To improve the possessed skills in order to upgrade the qualification, work conditions and life.
- To broaden the person's scope;
- To expand knowledge and skills in some fields that are relevant to people. These fields of production, technology, new laws are new to appear.

Nowadays, the TAH may ask for assistance from the organizations, which may provide funding for education and people development. These institutions are: a. Socially responsible enterprises; b. POs; c. Public state authorities (employment centers, secondary free legal aid); d. Third-generation universities.

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CONCEPTUAL APPROACHES TO ESTIMATING REGIONAL ECONOMIC DEVELOPMENT UNDER ADMINISTRATIVE-FINANCIAL DECENTRALIZATION IN UKRAINE

Puhach Yurii
Postgraduate student in the Department
of Finance, Banking and Insurance
Sumy National Agrarian University, Sumy, Ukraine

The desire to resolve certain issues on the ground on its own has become one of the main factors for reforming administrative units in most countries of the world. Such expectations are reasonably related to responsibility of communities for the development of their territories.

Ukraine has decided to take the path of active decentralization recently. Gradually domestic legislation adapts to European norms: ratified the European Charter on Local Self-Government, complies with the requirements of the World Declaration on Local Self-Government, the Constitution of Ukraine establishes the principles of local self-government, adopted a number of basic legal acts on the activities of local authorities, organization of the budget system, functioning of the institute of local self-government. The use of international experience and its implementation in the national legislation makes it possible to create conditions for faster transition to self-sufficient and effective development of administrative-territorial units, to ensure a sufficient level of financial independence.

The theoretical and scientific-methodological basis of the research was a systematic approach and a thorough study of the works of foreign and domestic scientists-economists on the problems of efficiency of distribution of financial resources by local governments.

Scientists take different approaches to understanding the concept of "financial decentralization" and treat it with certain features, namely:

- The process of expanding and strengthening the rights and powers of administrative-territorial units or lower bodies and organizations, while narrowing the rights and powers of the respective center in order to optimize and improve the efficiency of managing socially important affairs, the fullest realization of regional and local interests [1, p. 7];
- Extension of the competences of local administrative bodies acting within their competence independently and independently of the central authority [2, p. 154];
- Gradual delegation of the ever-growing part of the powers to regional, city and rural authorities [3];
- A way of territorial organization of power in which the state transfers the right to make decisions on certain issues or in a certain sphere to structures of local or regional level that are not part of the executive power system and are relatively independent from it [4, p. 88];

- Transfer of part of functions of state administration of central executive bodies to local executive authorities and local self-government bodies, extension of powers of lower bodies at the expense of higher ones [5, p. 111];

- A system of management under which part of the functions of the central government passes to local self-government bodies; abolishing or weakening centralization (extension of the rights of grassroots governing bodies) [6, p. 218].

Summarizing our views, we conclude that the main purpose of decentralization is the process of transferring central government revenue and expenditure management to lower budget levels in order to increase the efficiency of resource allocation and local decision-making.

Historically, approaches to local government in different countries have their own characteristics and distinctive features. In order to evaluate and further leverage foreign experience, it is appropriate to study deeply the underlying models that have high levels of fiscal autonomy. They are conventionally divided into three groups: Anglo-Saxon (Great Britain, USA, Italy, and Canada), Continental (Poland, France, Slovakia, some Latin American countries) and mixed (Germany, Japan, Russia, Austria). These models can be considered a benchmark for the sustainable development of financial decentralization.

The process of expanding local budgetary authority leads to better management efficiency and quality of public service delivery. However, not always transferring significant authority from the state to the local level without adequate financial support leads to the expected results. Therefore, considering and analyzing the models of local self-government in foreign countries, Ukraine should determine its direction of development of distribution of financial resources between budgets of all levels.

Studying the scientific literature, the works of domestic and foreign scientists, and the legal framework will note that the organizational composition of local finance in a transformational economy has a complex and branched structure. When summarizing the main areas of modern research on the development of local self-government, attention should be paid to the method of comparative analysis, economic-mathematical and statistical methods.

There is a methodology developed by the Organization for Economic Cooperation to assess financial decentralization in the framework of tax and expenditure policy, the movement of intergovernmental transfers, and debt policy. However, not only ministries but also private audit firms are responsible for such calculations and conclusions in various countries. In addition to generally accepted approaches, tailored integrated approaches to assessing financial statements can be applied. For example, in the US, the UK and France, they use advanced Public Expenditure and Financial Accountability (PEFA) estimation by calculating additional indicators.

There are different approaches to calculations and forecasts of the level of financial decentralization in Ukraine, but there is no clear justification for the economic content of this indicator. Several approaches are used to characterize the level of financial decentralization. In particular, the following scientists were engaged in

research in this direction: Bikidarov N., Boryslavska O., Vakhovich I., Lunina I., Salo T., Korneev M. The authors draw attention to the revenues and expenditures of local budgets, their structure, the possibilities of disposal of financial resources by local governments and use indicators for this purpose: coefficient of decentralization of expenditures, coefficient of decentralization of revenues.

The indicators characterize the level of budgetary decentralization, the formal role of local authorities in managing available financial resources.

T. Salo distinguishes the sum of the financial decentralization coefficient, which is calculated as the arithmetic mean of the financial decentralization of revenues and the coefficient of financial decentralization of expenses.

It should be noted that these formulas can be used to calculate revenue or expenditure fractions for different budget levels.

The indicator that characterizes GDP redistribution by local governments is the ratio of local budget expenditures to GDP. The proposed approach by Lunina I. [7] on the calculation of the integrated indicator of the state of a separate local budget allows evaluating the activities of local governments (according to the monitoring results). It can be calculated, for example, by the method of multidimensional classification or normalization of indicators.

The proposed Kostirko L. approach [8] on the complex analysis of financial stability with the help of an integral indicator makes it possible to take into account the cumulative influence of integral estimates on certain blocks of analysis. The author grouped the indicators into three groups, based on which the standardized indicators of financial balance, financial autonomy, and budgetary efficiency are consolidated. The integral indicator of the financial sustainability of the local budget is calculated as the sum of the aggregated standardized indicators by blocks of analysis, taking into account the weight of each block. The significance of the weight of budget coefficients is determined by the method of expert estimates.

The integrated metric enables you to determine the rating of an individual budget compared to other budgets and to propose development strategies based on calculations.

Summarizing the above, we conclude that a prerequisite for post-crisis reform of Ukraine's budgetary system and improvement of its control should be to monitor key indicators of local budgets and to carry out their comparative analysis on relevant budgets of local governments.

Attention should also be paid to the methodology for assessing the effectiveness of administrative and financial decentralization at the regional level, using a number of criteria that characterize the structural and dynamic changes in regional budget revenues / expenditures, capital investments and the performance of the regional economy [9]. Among these indicators are:

- The criterion for the dynamics of budget revenues of regions (> 1) - the degree of dominance of the index of growth of own revenues over the index of growth of transfers from the state budget;

- Criterion of revenue structure of regions budgets (> 50%) - share of own revenues in budget revenues;

- Criterion of the structure of transfers from the state budget (<2%) - share of subsidies in transfers from the state budget;

- The criterion of capital investment dynamics (> 1) - the degree of predominance of the index of growth of investments from local budgets over the index of growth of investments from the state budget;

- The criterion for the dynamics of own revenues and total expenditures of regions budgets (> 1) - the degree of dominance of the index of growth of own incomes over the index of growth of expenditures;

- The criterion for the dynamics of economic activity expenditures (> 1) - the degree of predominance of the index of growth of expenditures for economic activity over the index of growth of total expenditures of the oblast budgets;

- The criterion for the dynamics of the return on expenditures on economic activity (> 1) - the degree of dominance of the index of growth of the volume of sales over the index of growth of expenditures on economic activity. According to the periods for the defined local budgets (regions, districts, united territorial communities), each criterion is ranked according to the limit indicators of the criterion.

According to the results of the study, a matrix of defined budgets (regions, districts, united territorial communities) regarding the compliance of financial decentralization efficiency criteria is being constructed.

The conclusion of this study will be to evaluate the effectiveness of the mechanisms of administrative and financial decentralization in selected regions with a graphical interpretation of the results of diagnostics of financial and economic potential.

Summarizing, we present an algorithm that is desirable to be followed in the complex assessment of the level of financial decentralization (Fig. 1).

Unfortunately, it is not possible to cover all methods of assessing the functioning of local government. However, depending on the tasks, you can also use the following approaches:

- SWOT analysis is a strategic planning method based on the link between the strengths, weaknesses, and threats that are specific to the local community. The results of such studies may form the basis of a further development strategy;

- Programmatic targeting - a tool that provides mid-term planning that is focused on achieving a specific goal in accordance with established priorities. The focus here is on making the most efficient use of funds to produce concrete results;

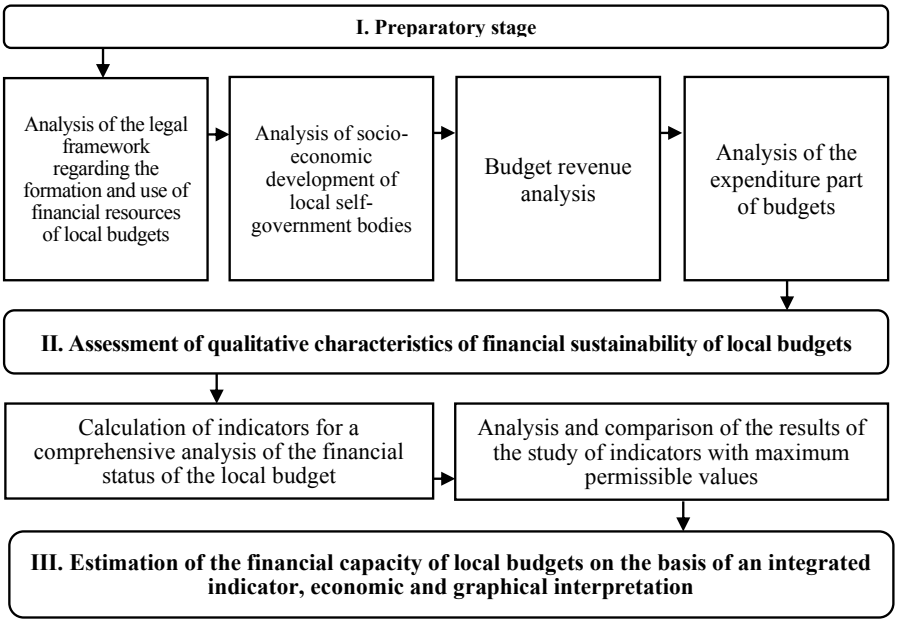

Fig. 1. The algorithm for studying the level of financial decentralization

- Construction of a multivariate regression model that enables economic processes to be expressed through mathematical modeling. Namely, to identify the mathematical relationship between the factor attributes and the dependent variable and the close relationship between these indicators (using correlation analysis), and to predict one variable based on another. It should be noted that such a model is not sustainable in the long term, as the external environment in Ukraine changes frequently;

- An attractive methodology for Ukraine is the network methodology for solving the problems of self-development of the region in the context of changing the priorities of national economy management, as well as the role of human capital accumulation in the processes of self-development of the region in the context of decentralization [10];

- The integration process also deserves the up-to-date cluster approach to implementing economic growth policy, which is most systematically and meaningfully reflected in the EU's Smart Guide to Cluster Policy published in 2016 for the EU countries.

Analyzing approaches to calculate the level of financial autonomy of territories in different countries, it can be stated that, to date, there is no universal model or methodology in the world that can be applied in full and unchanged in Ukraine. Achieving financial autonomy of local governments is one of the dominant trends in the development of the finances of administrative and territorial units worldwide. Decentralization is a multidimensional phenomenon, not only

statistical but also dynamic, it is a process. Therefore, approaches to assessment, analysis, recommendations for monitoring and forecasting local development are constantly being improved.

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Doctor of Economics Sciences,
Professor L. I. Mykhailova

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L. I. Mykhailova

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Dolna 17, Warsaw,
Poland 00-773
Tel: +48 226 0 227 03
Email: rsglobal.poland@gmail.com

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