

## DECENTRALIZATION OF RURAL AREAS THROUGH PUBLIC-PRIVATE PARTNERSHIP

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### Abstract

*The current state of economic development in Ukraine is characterized by the escalation of crisis processes that affected all spheres of public life. This is especially critical in rural areas. Modern approaches to crisis management in rural areas under conditions of decentralization are proposed by authors. The main concepts of the topic are considered and the authors' definition of the concept of "crisis public-private partnership in rural areas" is proposed. Crisis public-private partnership in rural areas is interpreted as a form of crisis cooperation between state, social and private sectors, based on the recognition that all parties benefit from the pooling of resources, innovations and managerial decisions for the purpose of realization of crisis principles and socio-economic development of rural areas. The basis of this is the application of the risk factor, which characterizes the ratio of the probabilistic value of the maximum possible loss to the normative value of the socio-ecological-economical component of rural areas. The purpose of the paper is to argue the necessity of decentralization of rural areas and to introduce proposals on its practical implementation. The research on decentralization of rural areas and its practical implementation is recommended to conduct by three stages. The anti-crisis approach to rural area management in decentralization conditions, which is based on the fundamentals of the public-private partnership is proposed. It is suggested to make calculation of the decentralization ratio, which will determine the category of the crisis level for the rural area in decentralization conditions and will supply adequate suggestions for its development.*

**Key words:** crisis management, rural areas, decentralization, crisis process, public-private partnership

### INTRODUCTION

In times of the current state of economic development in Ukraine is characterized by the expansion of the crisis processes that affect all spheres of life. The particularly critical situation becomes apparent in the countryside: production is reduced, massive labour migration takes place in big cities and other countries, and infrastructure is on the decline. Under these circumstances, the paper constitutes new reforms that should be implemented by the Ukrainian government. Now it is important to put crisis management in use taking into account the decentralization reforms to overcome the situation in the rural areas.

The significance of decentralization is defined as one of the key principles of the

development of democracy in the states of the European Union and the Council of Europe, the basis of their regional policy, along with the principles of subsidiarity, concentration, complementarity, partnership, and program approach. This principle is obtained in the European Charter of Local Self-Government and the European Charter for Regional Democracy have their concerns about the redistribution of powers to regions in order to effectively use internal potential, encouraging regional initiatives, differentiating functions and powers between different levels of government (Bezvernuyk T. M., 2007) [3]. Decentralization is a candidate countries' prerequisite for full accession to the European Union and is based on all sectoral policies that are being developed and implemented within the EU.

Decentralization is a process of the functional division of power, people and things between the authorities (Stepaniuk, 2017) [20]. This issue is especially important for rural areas with a significant imbalance in the development and low socio-economic assessment. Generally speaking, the usage of crisis management is rather essential during the reform.

Crisis management of rural areas under decentralization involves making managerial decisions. It is often assumed in a high level of uncertainty, with lack of time, due to limited financial resources, and considering the development of crisis processes in rural areas, taking all these into account for new approaches to put into the reforms.

The crisis management provides for the presence of two necessary components - the subject of management (component making the managerial influence) and the object of management (part of the system which is influenced by the directions of the management).

Under the condition of decentralization, the management of rural areas is provided by local governing. In this condition, the system organized by the authority on a local level, due to the local community's demand, acquires a real possibility to solve problems related to the organization of their life in different ways, independently and regardless of the state. At the heart of local authority lies the territorial community (initial subject) – people, who in consequence with natural resettlement live on certain territory and have their right to solve their issues in their favour on a local level (Law of local governing in Ukraine, 1997) [10]. One of the objective reasons for the necessity of local governing existence in a modern state is the theoretical likelihood of having differences between national and local communities' interests. Therefore, a local governing mission is called upon to reasonably coordinate these differences. The state government cannot regulate all problems that appeared in rural areas.

The purpose of the article is to explore the crisis management of rural areas under the

conditions of decentralization, to formulate a definition of its concept

In order to obtain the task, our main goals are:

- to state “the crisis management of rural areas under the conditions of decentralization” definition;

- to implement the stages of the crisis management of rural areas under the conditions of decentralization;

- to develop a comprehensive program-targeted approach towards the rural area growth based on a public-private partnership;

- to formulate the model of integration for the public, rural communities, business and science-based public-private partnerships.

Breadth and ambiguity of various aspects of the problem are being studied, their significance in the concept of sustainable development of agriculture determined the choice of research topic, the purpose, tasks and structure. Numerous publications of both domestic and foreign scientists are devoted to the problems of crisis management (Asaul A., 2007, Ligonenko L., 2005, Bonyar S., 2013 and others) [1, 11, 4].

The actuality of decentralization and management under the crisis put a wide range of scientists in the condition of discussing and finding suitable approaches to solving given issues. The researchers, such as (Averyanov V., 2002, Danylyshyn B., 2016, Hritsiak I., 2005, Karkovska, V. Ya., Perkhach, O. L., Vasiunyk, P. I., 2015, Kramon-Taubadel S., 2014, Myronova T., 2006, Nyzhnyk N., 1997, Oates W., 2008, Perkhach O. L., 2016, Perkhach O. L., Khymych O. V., 2016, Sakal O., Kovalenko A, Tretiak R, Tretiak N., 2019) [2, 5, 6, 8, 9, 12, 13, 14, 15, 16, 17].

investigate the essence and the content of decentralization the phenomena, analyze and diagnose the directions of government reforms, analyze foreign experience, make proposals to improving the efficiency and effectiveness of the government and the crisis management in Ukraine. According to the work of scientists, not enough attention has been paid to the crisis management approach, to the factors of decentralization and their impact on the development of rural areas which are not taken into deep consideration.

It can be assumed that the management of rural development which has been studied from the point of view of rural areas and agriculture identification, determines the limited scope of the search for measures to ensure the economic development of rural areas, taking into account growing crisis manifestations. In our opinion, it is necessary to study the rural areas, as economic subjects, within social and political relations. It should be notified that in many cases the consequences of decentralization are unpredictable.

## MATERIALS AND METHODS

The methods used in the article are the following: the study of phenomena (object, subject), its division into parts; identification and analysis of the correlation between the factors and results (crisis management in conditions of decentralization). Various approaches were explored in the article to timely prevent and overcome crises, including the methods of economic analysis (studying the economic condition of rural areas), forecasting (revealing the factors of rural areas' development), social technologies (the aggregate directions of the professional impact on social objects in rural areas with the purpose of its improvement and ensuring the optimal usage under the different influence of decentralization process) and the development of crisis programs and complex investment projects, plans for restructuring and reorganization (methodical approach of management of projects). As we consider, it is worth using the inductive method in case of crises management study in Ukraine. As long as the purpose of crisis management of rural areas in the condition of decentralization is the developing economy state due to territorial growth including rural areas.

It has been a while since agriculture has been considered the basic development of Ukraine for years. Nowadays, the agrarian branch of the economy is less developed and even unprofitable due to different reasons.

Ukraine faced considerable difficulties, mainly: problems of uneven territories' development, significant differences in

economic districts' development, an imbalance in relations between central executive power and institutions of local governing. It became necessary to solve these and other problems by reforming the public administration system and the introduction of decentralization policies.

Therefore, the authors consider it to be necessary to implement well-planned and carefully thought through reforms of decentralization in Ukraine. Under such circumstances an appropriate condition for bringing the power closer to the population, forming a flexible management system, assessment of the existing potential of rural areas, investigating the crisis sides of the development, it will ensure taking the initiatives and putting it into the development of the civil activity of rural residents.

In order to identify the crisis state of the territories in the conditions of decentralization we propose to determine the risk factor ( $K_p$ ), characterizing the ratio of the probabilistic value of maximum possible loss ( $Z_{max}$ ) to normative the value of a socio-ecological-economical component of rural areas ( $K_{0j}$ ), calculated by the formula (1):

$$K_p = \frac{Z_{max}}{K_{0j}} 100\% \dots\dots\dots(1)$$

As a result of determining the coefficient, the obtained value is estimated on a scale:

- up to 10% - favorable state;
- up to 10% to 30% - optimal state;
- up to 31% to 69% - alarming state;
- up to 70% - a crisis condition.

At the same time, it is appropriate to take into an account the total decentralization factor in decision-making ( $K_d$ ), which allows assessing the degree of decentralization in a particular management system and is calculated by the formula:

$$K_d = \frac{r_i}{R_i} 100\% \dots\dots\dots(2)$$

where:

$r_i$  - the number of decisions taken at the lower levels of the hierarchy in the  $i$ -th period;

$R_i$  - the total number of decisions in this period.

Scale for calculating:

0.0-0.1 - the minimum degree;

0.1-0.3 - insignificant degree;

0.3-0.5 - average degree;

0.5-0.8 - a significant degree;

0.8-1.0 - high degree.

The lower the coefficient to one means the higher the degree of decentralization. But the number of decisions is insufficient because it is not taken into account the importance of the decisions taken at the lower levels of management and the degree of their independence, therefore, the definition of this indicator is of a general nature.

The initial data for the definition of this ratio was the data of the assessment of the financial capacity of the combined territorial communities operating in the regions, based on the results of the monitoring of the implementation of local budgets for 2017 and the following indicators, which reflect: its own income per capita; the level of subsidization of budgets (the share of basic/reverse subsidies of income); the specific weight of expenditures on management maintenance of the staff in the community's own resources (without any transfers from the state budget); capital expenditures per inhabitant.

According to the results of the research, we propose a model for identifying the crisis situation of rural areas in conditions of decentralization, taking into account the availability of potential (resource, labour), social, ecological and economic components of the development of territories, the risk factor for the crisis and the overall coefficient of decentralization:

$$N = E_s^y + d_i + K_p + K_d \dots\dots\dots(3)$$

where:

$N$  – the identification of the crisis state of the territories in conditions of decentralization;

$E_s^y$ – aggregate potential;

$d_i$  – taxonomic index of the investigated cluster configuration;

$K_p$  – risk factor;

$K_d$  – total decentralization factor in decision-making.

The aggregate potential ( $E_s^y$ ) is determined by the equation:

$$E_s^y = \frac{P^y}{V^y} = E_n \bullet d_n + E_l \bullet d_l + E_k \bullet d_k, \dots\dots(4)$$

where:

$d_n, d_l, d_k$  – the specific gravity of the natural, labour and stock potentials in the aggregate potential;

$E_n, E_l, E_k$ – the potential of natural resources, the potential of labour resources and the potential of fixed capital.

## RESULTS AND DISCUSSIONS

The calculation of these indicators significantly affects the approaches to making managerial decisions. Such calculation is important because of its local level where it is reserved for supporting and increasing economic growth, the formation of an effective management apparatus and an increase in the level of social well-being of the inhabitants.

One of the negative decentralization's effects on the development of the rural areas is strengthening interregional and intra-territorial differentiation of development. This is related to the different potential of territories' development and opportunities to accumulate financial resources while attracting investors.

In practice, a significant part of rural settlements does not provide constitutionally guaranteed public goods. As a result of insufficient diversification of production, many settlements (monofunctional villages) are in a stagnant stage.

Considering the above-mentioned methods, the authors of the research have developed and composed a classification matrix, which serves as a basis for the distribution of regions into the groups by their values according to the model of a territorial determination under the critical decentralization conditions Stepaniuk N. A., 2017 [20] (Table 1).

Table 1. Cluster grading of the regions of Ukraine

Clusters	Region	Calculated values				Index of crisis conditions of territories under decentralization ( $N$ )
		$E_s^y$	$d_i$	$K_p$	$K_d$	
V	Luhansk*	0.02	0.1	0.02	0.02	0.16
	Rivne	0.03	0.1	0.02	0.02	0.17
	Ternopil	0.04	0.1	0.02	0.02	0.18
	Khmelnyskyia	0.05	0.1	0.02	0.02	0.19
	Chernivtsi	0.08	0.1	0.02	0.02	0.22
IV	Kirovohrad	0.06	0.1	0.02	0.05	0.23
	Kherson	0.07	0.1	0.02	0.05	0.24
	Cherkasy	0.07	0.1	0.04	0.06	0.27
III	Chernihiv	0.09	0.1	0.07	0.09	0.35
	Volyn	0.03	0.2	0.07	0.06	0.36
	Zhytomyr	0.06	0.2	0.08	0.08	0.42
	Ivano-Frankivsk	0.08	0.2	0.10	0.10	0.48
	Mykolaiiv	0.13	0.2	0.12	0.13	0.58
II	Donetsk*	0.14	0.3	0.11	0.12	0.67
	Transcarpathian	0.16	0.3	0.14	0.14	0.74
	Kyiv	0.16	0.3	0.15	0.15	0.76
	Lviv	0.17	0.3	0.15	0.16	0.78
	Odessa	0.16	0.3	0.16	0.17	0.79
	Poltava	0.17	0.3	0.16	0.17	0.80
	Sumy	0.16	0.3	0.17	0.17	0.80
	Kharkiv	0.18	0.3	0.17	0.17	0.82
I	Zaporizhzhia	0.18	0.4	0.14	0.12	0.84
	Dnipropetrovsk	0.20	0.4	0.19	0.17	0.96

\* The data are presented without the statistics on the temporarily occupied territories and the annexed Crimean AR.  
 Source: calculated by the authors.

The cluster grading, which is based on the level of factorial macro-economic indicators and coefficients of the mechanism of financial stable budget formation for the regions of Ukraine, has resulted in the formation of five clusters. Administrative regions of the I cluster are the closest to the reference, whereas the worst indices of the crisis conditions of territories under the decentralization are marked in the V cluster. Regions of the V cluster (Luhansk, Rivne, Ternopil, Khmelnytskyi, and Chernivtsi region) stay in the critical crisis conditions. In such a situation, it is urgent to take measures, which would develop the fundamentals of crisis management in a decentralization situation. To study the problem, the authors made a SWOT-analysis and analyzed the dynamics of economic development, as well as defined the priority directions of the anti-crisis strategy for the V cluster. Based on detailed cluster analysis, the authors of the research made an attempt to forecast the general coefficient of the decentralization of

crisis management of the national economy considering the probability of the three scenarios of the development (Table 2). According to the forecasted calculations of the general coefficient of decentralization by the three scenarios, the authors argue the importance of crisis management for the development of the economy of Ukraine. At present, Ukraine does not have effective approaches to crisis management of rural areas. Today, there are many worldwide approaches and methods of decentralization and management of rural areas in conditions of crisis phenomena. But at the same time, none of them in pure form can be used in Ukraine. We offer our own vision of the stages of crisis management of rural areas under the conditions of decentralization (Table 3). The implementation of these stages will contribute to the strategic development of the crisis management process in rural areas in the process of decentralization.

Crisis public-private partnership is one of effective crisis response and socio-economic development of rural areas.

Table 2. Forecast of the general coefficient of the decentralization of crisis management for the national economy

Cluster	Forecast	Years			The average annual rate of growth, %
		2021	2022	2023	
I	pessimistic	0.25789	0.26652	0.26925	1.021788
	realistic	0.32812	0.32952	0.36285	1.051592
	optimistic	0.34255	0.42267	0.45091	1.147316
II	pessimistic	0.28532	0.30514	0.31125	1.044452
	realistic	0.33251	0.34178	0.37599	1.063373
	optimistic	0.35214	0.36224	0.47712	1.164009
III	pessimistic	0.30154	0.32519	0.33571	1.055139
	realistic	0.44652	0.44851	0.45128	1.005316
	optimistic	0.66225	0.67021	0.68828	1.019463
IV	pessimistic	0.30258	0.31147	0.31786	1.024939
	realistic	0.45127	0.47011	0.46854	1.018955
	optimistic	0.66675	0.67002	0.68141	1.010934
V	pessimistic	0.30699	0.31128	0.32593	1.030386
	realistic	0.56189	0.57741	0.58099	1.016854
	optimistic	0.68145	0.68856	0.69065	1.006728

Source: calculated by the authors according to statistical data of the State Statistics Service of Ukraine

Table 3. Stages of crisis management of rural areas under the conditions of decentralization

Stages	
1	Elaboration and confirmation of the crisis management plan for rural areas under the conditions of decentralization
2	Identification of financing sources for crisis management of rural areas under the conditions of decentralization
3	Carrying out a typology of rural areas, estimation of available potential and other calculations
4	Creating a commission on the study of rural areas development problems
5	Working out the state strategy of rural areas management under the conditions of decentralization (including by types of rural areas)
6	Elaborating and implementation of a legislative framework for the development of rural areas under the conditions of decentralization
7	Forming a system of training and retraining of personnel for crisis management of rural areas under the conditions of decentralization.
8	Developing and implementing regional and local rural development strategies for the areas.
9	Basic structural socio-economic transformations and ecologization in rural areas of crisis management under the conditions of decentralization

Source: developed by the authors.

The development of public-private partnerships in rural areas was considered to be the 50th plenary meeting of the UN Union between the public and private sector in the interests of agricultural development on July 23, 2004, which emphasized the importance

of public-private unions and partnerships among subjects in different sectors to promote integrated rural areas development (Hubeni, 2007) [7].

In complicated modern political, economic and social conditions of Ukraine, public-private partnership is one of the best ways to implement long-term, capital-intensive and socially significant projects in rural areas. In our opinion, a private-public partnership can become an effective tool for the development of rural areas.

Based on the program-targeted method, we have elaborated on a comprehensive approach for the development of rural areas, which allows it to be synchronized combining the priorities of national projects in the model of rural areas (Figure 1).

The result of implementing this approach is the effective use of the potential state support and self-development of rural areas.

We consider defining the term "crisis public-private partnership in rural areas" as a form of crisis cooperation between the public, social and private sectors, based on the recognition that all parties benefit from pooling the resources, using innovations and managerial decisions for the purpose of implementation

of crisis principles and socio-economic development of rural areas.

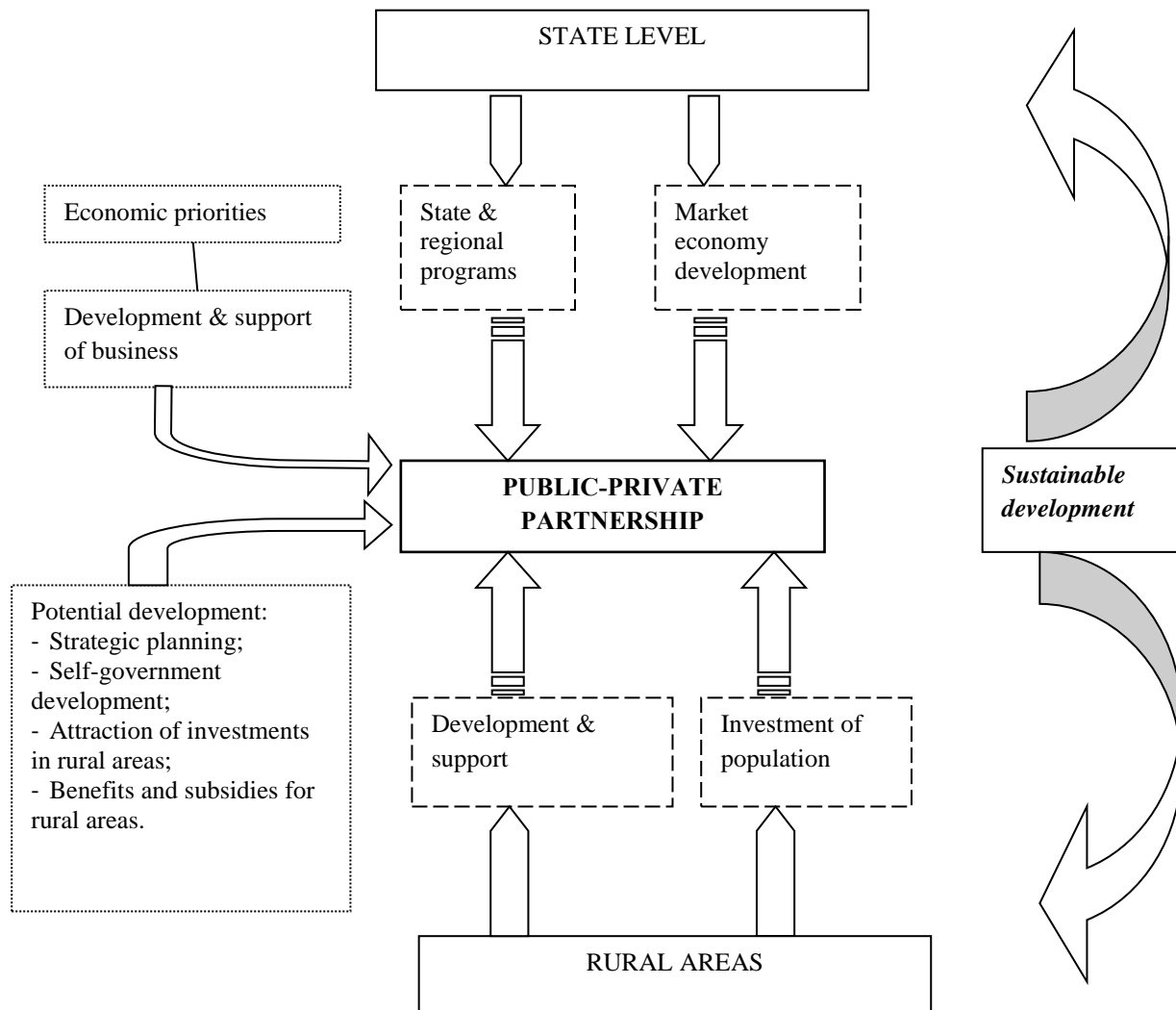


Fig. 1. A comprehensive approach to rural area development based on a public-private partnership  
 Source: developed by the authors

In Ukraine, we notice a very slow transition from the predominantly public administration to the public-private partnership, based on the principles of multilateral social, economic and environmental trends and the transfer of a part of the functions of public administration to the communities. In case of necessity for management in the conditions of crisis and decline of rural areas in Ukraine, the usage of public-private partnerships will have a need to be contributed to improving the quality of life of peasants.

The most important feature of the public-private partnership is functioning in a crisis economy, based on the interaction of state and private property, forming the specificity of appropriation relations. Such a partnership

provides the choice of the most effective ways of using both state and private property as their transformation slowly takes place. As a result, a combined form of ownership is created that provides a synergistic effect.

The use of public-private partnerships should affect the main factors hampering the entry of businesses into rural space with innovative ideas due to financial problems, inadequate government support for innovation development, including low qualification staff. The methodical approach for the integration of the state, territorial communities, business and science on the basis of public-private partnership in the countryside with the object of rectifying the situation is proposed (Figure 2).

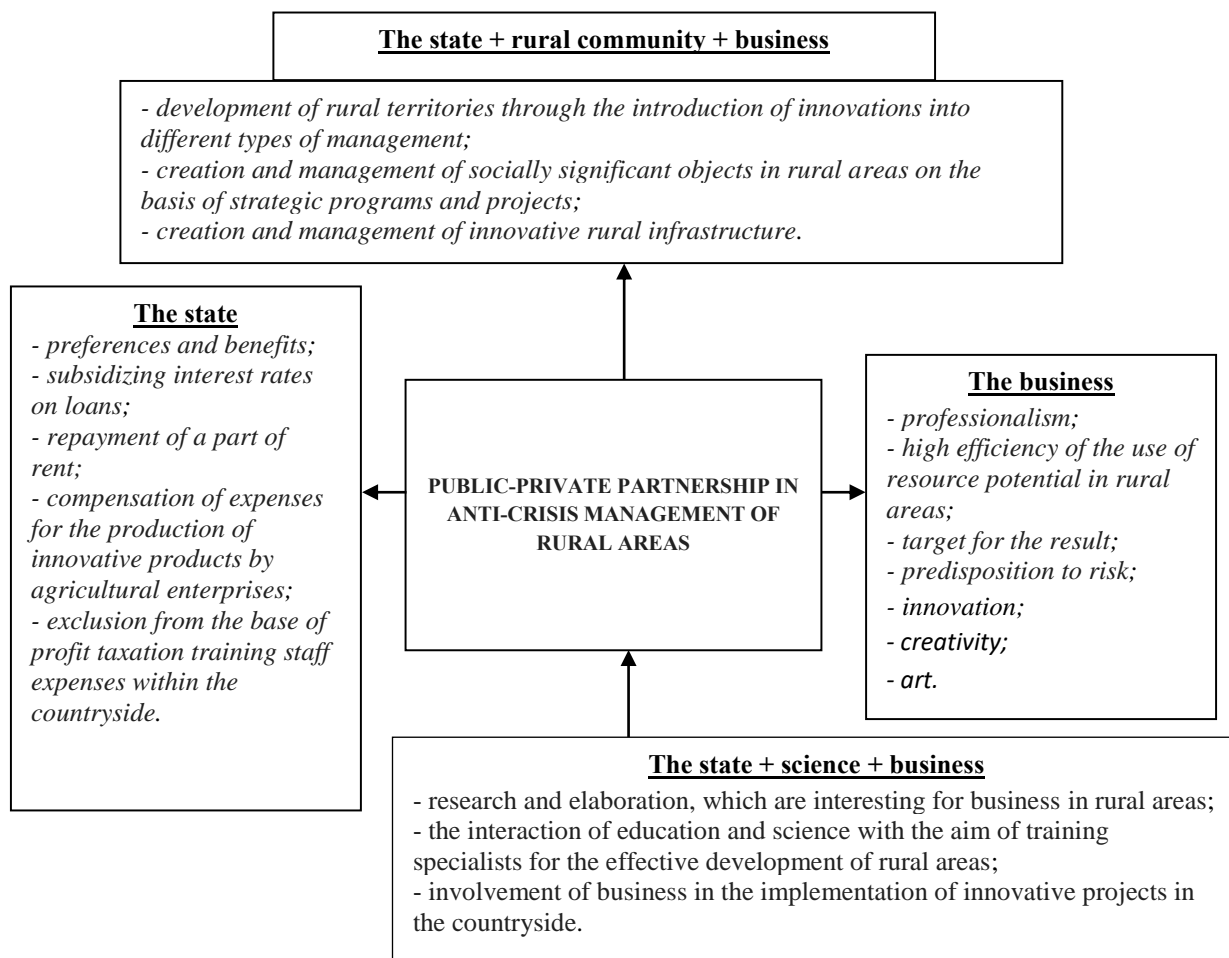


Fig. 2. Model of integration of the state, rural communities, business and science-based on public-private partnership (elaborated by authors)  
 Source: developed by the authors.

The proposed model will contribute to sustaining the demand for innovation in agriculture through financing the integration of science and business. However, in Ukraine, the demand for technological innovations remains extremely low compared to developed countries - the number of domestic industrial enterprises purchasing intellectual development for the purpose of implementation is less than 3% (Stepaniuk, 2015) [19].

The application of the proposed model will allow the development of rural areas increasing the efficiency of agriculture, bringing the country out of the crisis.

## CONCLUSIONS

The obtained data allow us to determine the possibilities for the introduction of the authors' approach to crisis management in

rural areas under decentralization. The basis of which is a public-private partnership, the integration of the state, rural communities, business and science.

Taking into consideration the large-scale crisis processing in Ukraine, significant potential in rural areas has already been lost. It is possible to stop this process only with prudent state policy. Therefore, the calculation of the decentralization factor will significantly affect the quality of the decisions taken in crisis management.

Above mentioned notion based on a methodical approach to a public-private partnership, however, the authors developed their own approach that takes the specific conditions of rural areas into account.

The implementation of the authors' recommendations will lead to positive changes, mainly: the growth of rural population, the renewal of productive capacity



in rural areas, increasing the interest of employees in original production activities or hiring on purpose to increase income increase of families' living standards, especially in villages.

The decentralization reform is aimed at the development of territories, including rural ones. The authors' vision encompasses an integrated approach and is aimed at the gradual implementation of decentralization in rural areas under the current conditions of crisis phenomena.

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