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UKRAINE'S RURAL AREAS IN THE CONDITIONS OF DECENTRALIZATION AND LOCAL SELF-GOVERNMENT REFORM: CHALLENGES AND PROSPECTS

Purpose. The purpose of the study is to determine the state, identify the main challenges and risks affecting rural development in Ukraine, and assess their influence on the effectiveness of functioning and financial capacity of rural territorial communities in the conditions of power decentralization and self-government reform.

Methodology / approach. The methodological basis of the research was a systematic approach to the study of the investigated phenomena and processes and the dialectical method of cognition, as well as general scientific and special methods. In order to assess the state and trends of rural development in Ukraine, economic and statistical methods were used in analytical studies (comparative analysis to compare the results obtained in certain years, average and relative values, trend analysis, index analysis, etc.). This was done to establish certain relationships, such as identity, similarity, or difference between characteristics and facts. To determine the influence of individual factors on the operational efficiency and financial capacity of territorial communities, multiple correlation and regression analysis was used. A number of abstract-logical techniques made it possible to formulate intermediate and final conclusions and proposals.

Results. Current conditions are analyzed and trends of rural development in Ukraine for 1990–2022 are determined. It was found that over the past 32 years, the socio-economic crisis in rural areas continues to worsen, which is manifested in declining employment rates, increasing unemployment, rising poverty, mass migration of peasants, deterioration of infrastructure and access to social services. The main challenges and problems of rural development have been identified and systematized by groups: socio-demographic, economic, environmental and nature protection, institutional, political. To assess the factors influence on the effectiveness of functioning and financial capacity of territorial communities, a multifactorial correlation and regression analysis was conducted. It was found that the level of capital expenditures is most affected by the fiscal return of the community territory per 1 inhabitant.

Originality / scientific novelty. The elements of scientific novelty consist in the introduction of a systematic approach to generalizing challenges and problems affecting the development of rural areas and communities, which were systematized by groups: socio-demographic, economic,

environmental and nature protection, institutional, political. The scientific and methodological foundations of studying the socio-economic situation in Ukraine's rural areas in terms of determining the factors and assessing their influence on the effectiveness of functioning and financial capacity of rural territorial communities have been further developed.

Practical value / **implications.** The identification of factors and their influence on the functioning effectiveness and financial capacity of rural territorial communities can be taken into account by state institutions when reviewing previously adopted documents and elaborating strategic plans for the restoration and development of Ukraine's rural areas, taking into account internal threats and the long-term external aggression of the russian federation against Ukraine.

Key words: rural areas, rural territorial communities, administrative and territorial reform, financial capacity, factors, development.

Introduction and review of literature. The difficult socio-economic condition in most rural areas of Ukraine, the spread of tendencies towards their decline, impoverishment of a large part of the rural population require significant changes in the state management of rural development. In this regard, it is considered necessary to change approaches to determining priorities and goals of rural development policy and form a new system of motivation for the territorial communities' development. An important component of this process is, first of all, the transfer of power and financial authority to territorial communities and local self-government at the basic level. To this end, administrative and territorial reform was launched in Ukraine in 2014.

With the expansion of the powers and capabilities of rural territorial communities as a result of decentralization, they are increasingly entrusted with the need to equalize the socio-economic development of settlements and ensure sustainable rural development. In turn, this requires determining the influence of various factors on the development of territorial communities in rural areas. To substantiate strategic guidelines for the socio-economic development of rural areas in conditions of decentralization, it is also important to analyze and evaluate existing problems and resources for solving them in a specific region. Due to the unevenness and disproportions in the development of the entire set of socio-economic and environmental processes, which are unique for each region and natural-economic zone, the regional approach to ensuring sustainable rural development is gaining special relevance [1].

The complexity, insufficient study and uncertainty of these issues at the theoretical, methodological and applied levels require constant monitoring of the situation dynamics in rural areas, the effectiveness of implementing decentralization elements in them, the elaboration and implementation of effective measures aimed at ensuring rural development, improving the welfare and quality of life of peasants, and confirm the relevance of this study.

It is worth noting a significant contribution of such well-known Ukrainian scientists as: O. Borodina et al. [2–5], K. Vaskivska et al. [6], Yu. Hubeni [7], M. Dolishniy et al. [8; 9], E. Libanova et al. [10], R. Khirivskyi et al. [11], V. Tereshchenko, P. Laiko [12], Yu. Lupenko et al. [13], O. Pavlov et al. [14], A. Sava [15], P. Savchuk et al. [16], O. Slavkova [17], A. Sokolova, T. Ratoshniuk

[18], Yu. Shpyliova [19] and others to the priority socio-economic directions of rural development at the regional and local self-governing level. Their research covers a wide range of problems related to rural development: from the genesis, essence and significance of rural areas to the elaboration and justification of strategic guidelines for their development, considering the practice and experience of solving these problems in other countries.

A significant contribution to forming the basic principles of rural development was made by R. Chambers [20]. In particular, he investigated the sustainability of economic development and the quality of life of the rural population, noted an important problem that people (academic researchers, civil servants, politicians, consultants, etc.) engaged in rural development underestimate rural poverty. In fact, they are neither rural nor poor and therefore understand the nature of rural poverty. And it is not worth expecting them to develop real measures aimed at overcoming poverty or solving other problems of rural development.

In the study of the theoretical and methodological basis of rural development, it is worth highlighting the scientific works of O. Pavlov [21–23]. The scientist thoroughly investigated the economic essence, types, structure and functional purpose of rural areas, which, in his opinion, are heterogeneous multifunctional formations with the population as a system-forming element.

In the context of globalization of the socio-economic space of the world's agrarian systems, according to I. Kravchuk [24], an important role is played by the development level of local (territorial) spaces (rural areas), which are the basic segment of food supply, formation of the countries' export agricultural potential and maintenance of the health of nations.

In view of the above, scientists of the Institute of Agrarian Economics define rural development as a process aimed at a stable and balanced development of agricultural production, rural settlement network and rural areas on the basis of a modernized system of socio-economic development, the formation of a proper ecologically safe environment as a guarantee of reliability and attractiveness of residence, work and recreation of the population [25].

Monitoring the socio-economic problems of rural development in Poland, A. Rosner and M. Stanny emphasize the need for researchers to focus on key economic and non-economic aspects of rural development, including deagrarianization of the local economy, characteristics of the agricultural and non-agricultural sectors, spatial accessibility of communes, local state finance, labor markets, demographic changes, education, social engagement, local community wealth and living conditions [26].

The main priorities of the policy of sustainable development of rural areas, according to M. Tymoshenko [27], should be their integrated development aimed at ensuring attractive and appropriate working and recreation conditions; creating a comfortable living environment; reducing poverty and increasing the competitiveness of the rural economy through diversification and agrarian entrepreneurship.

Further deepening of destructive social processes in rural areas can be

prevented, according to N. Patyka and O. Bulavka, through the gradual implementation of a complex of regulatory-legal and organizational-economic measures, which will be based on the real demand and supply of social services at the micro-level, i.e. strengthening the regulatory influence of local self-government authorities on the foundations of an organic combination of the local government structures functions with regional and national authorities in solving the problems of social development of rural areas [28].

The importance of the development of rural areas for the national economy is also indicated by I. Petretsky [29]. However, he adds that "...despite their importance for the national economy and the declarative attempts of the state authorities to improve the socio-economic situation of rural areas, their recession is observed, accompanied by a number of economic, social, environmental and demographic problems". He sees a way out of this situation in effective administrative and territorial reform. In his opinion, "...under the conditions of institutional changes with power decentralization and effective local management, rural territories open up significant administrative, socio-economic, resource-production and innovation-investment potential".

In the context of this study, the statement of T. Zinchuk [30] is true that the role of territorial communities (TC) in the period of power decentralization reform was especially relevant in view of the economic, social and environmental challenges that are most noticeable in the life processes of rural areas.

The expediency and timeliness of the administrative-territorial reform in Ukraine are also emphasized in the research by academician V. Riabokon [31], pointing to the important role of local budgets in the development of rural areas, which as a result of this reform "...will receive full independence when using available financial resources regardless of the central budget". However, the scientist also focuses on the shortcomings and miscalculations allowed in the decentralization reform, namely, administrative interference, haste, violation of the principle of voluntariness in the unification of communities, etc., which is a direct violation of the adopted normative legal acts.

The effectiveness of implementing the decentralization reform in the deep conviction of T. Hohol and L. Melnychuk [32] is possible only under the conditions of a cohesive community of residents, strong institutions and effective state administration.

According to some other scientists, the main resource for the development of territorial communities is not only financial or material resources, but also the residents themselves, their activity and entrepreneurship. V. Medvid came to such conclusions in his research [33]. However, according to his estimates, only every ninth respondent is aware of this. At the same time, community residents give preference exclusively to economic areas of development of social, cultural and environmental projects.

A. Kolosov and his colleagues studied the role of an individual – a TC member as a self-sufficient economic object in the success of community development [34].

In particular, they consider the insufficient attention to identifying initial conditions for the formation of capable TCs to be the theoretical, methodological and applied reasons for the ineffectiveness of TC functioning. Thus, in their research, the scientists prove that the TC potential opportunities to provide development prospects to each of its residents are very different, in cities they are much higher than in townships, and especially in villages, which was not considered in the process of creating rural and township TC. As a result, a model was formed where some TCs (recipients, more often – urban ones) attract residents from other TCs (donors – rural, township) for work, purchasing goods, paying for services, etc., which contributes to their development, while TC-donors lose resources (human, financial) for their development.

According to N. Hlynskyy et al. [35], the result of effective actions and decisions taken in the short and medium term can only be demonstrated by those sparsely urbanized territories where an effective system of local self-government has been formed. Increasing public activity and raising residents' expectations from local authorities is an additional and important factor that encourages the latter to use limited development resources to the maximum efficiency.

Evaluating the potential rejection of the idea of voluntary association by citizens and especially local governments, I. Tomashuk [36] defines one of the government tasks in the transition to the decentralization of state administration to include the motivational factor of reforming local self-government. He also emphasizes that one of the fundamental conditions for the independence of local self-government authorities is financial decentralization. In addition, the administrative-territorial reform itself should be considered "...as a factor that directly affects the diversification of rural development".

Continuing this opinion, O. Dovhal [37] notes that the decentralization reform actualizes the task of optimally choosing the structure of economic activity of a particular region, according to a set of regional production factors that are in excess compared to other regions. In his research, the scientist argues that the level of well-being of territorial community members depends not only on the availability of resources, but also on how fully and effectively they are used.

V. Rossokha and M. Plotnikova also emphasize increasing the responsibility of local governing authorities for the socio-economic development of rural areas, the use of their resource potential, the intensification of economic activity and private-state partnership in the region due to the expansion of their powers in the process of decentralization reform [38].

In general, the researchers' opinion regarding the positive impact of the decentralization reform on the development of rural areas through the emergence of new development opportunities for them is shared by S. Belei [39]. However, he emphasizes the need for "...the formation of a holistic vision of relevant measures, clear criteria for assessing and forecasting their impact on the socio-economic development of rural areas in order, first of all, to ensure capacity". As an indicator of rural development, S. Belei sees the elimination of asymmetries and disproportions, overcoming socio-economic depression and improving the quality of life of the rural

population.

Analyzing the decentralization reform and its impact on the development of communities. Z. Sirvk and co-authors [40]. along achievements in completing the stage of territorial communities formation, note that the decentralization process still requires a clear regulatory and legal framework. adoption of important systemic acts and changes in the approach to forming communities, taking into account not only the level of financial capacity, but also the possibility of their development in the long term. According to their estimates, as of the beginning of 2020 in Ukraine, there was a rather high differentiation in the financial capacity level of existing TCs: currently, among others, only the communities of cities of regional significance have a high level of financial capacity. The rest of communities, especially those with a population of less than 5,000 people, are at risk of insolvency, which threatens their future development and indicates a lack of community unification on a voluntary basis.

The key to the success of the decentralization process, according to E. Zhumagulov et al. [41], is the availability of stable and sufficient financial sources of local self-government. In their opinion, the positive development of local self-government in the Republic of Kazakhstan can be expected if there is a clear differentiation of the sources of budget revenues at all levels, the distribution of budgetary powers, the legislative definition of the principles of formation and use of financial resources, effective relations of local self-government with business entities and financial and credit institutions.

Continuing the topic of financial decentralization and assessing its impact on regional development, I. Tsymbaliuk and B. Pidtserkovnyi [42], using indicators of financial self-sufficiency, revealed the relationship between financial decentralization and the dynamics of regional development, which is manifested in promoting the unification of territorial communities, but leads to a significant accumulation of local budgets in the country's banking system. This, in turn, indicates the inefficient use of resources obtained as a result of financial decentralization by local self-government authorities

Carrying out a quantitative assessment of the impact of European Union financial subsidies on the socio-economic development of rural areas in Romania, emigration processes, and the growth of Romanian agritourism, N. Galluzzo [43] notes their key role in stimulating the diversification of farm production resources, thus confirming the role of state authorities in the development of rural areas and agritourism in Romania.

S. Vasarri and P. Salek-Lipcean [44], summarizing the results of their study of decentralization processes in the Eastern Partnership countries, recommend including the principle and concept of subsidiarity in the country's legislation, which means a dynamic principle of power distribution among different levels of government. In their view, in order to achieve development goals, resource and expenditure planning should be based on medium- and long-term strategies. The availability of financial resources may not be sufficient to ensure development if they are used inefficiently or

improperly.

At the same time, a certain part of problematic issues requires a more detailed study. Despite considerable theoretical and methodological developments and numerous works, the issues of identifying the main challenges and risks affecting rural development in Ukraine, assessing the degree of their influence on the efficiency of functioning and financial capacity of rural territorial communities in the context of power decentralization and self-government reform in Ukraine do not lose their relevance and require in-depth research.

The purpose of the article. The purpose of the study is to determine the state, identify the main challenges and risks affecting rural development in Ukraine, and assess their influence on the effectiveness of functioning and financial capacity of rural territorial communities in the context of power decentralization and self-government reform.

In this paper, a working hypothesis was developed, which follows from the purpose of the study, namely: the administrative-territorial reform in Ukraine is ineffective and negatively affects rural development in Ukraine, as confirmed by the dynamics of the main socio-economic indicators.

To achieve the defined purpose, the following research tasks were formulated:

- to analyze current conditions and determine trends in rural development in Ukraine;
- to summarize normative legal acts for implementing the state policy on the socio-economic development of rural areas;
- to identify and systematize the main challenges and problems affecting the development of rural areas and communities;
- to assess their influence on the efficiency of functioning and financial capacity of rural territorial communities.

Methodology. To solve the research tasks and achieve the set purpose, the dialectical method of scientific knowledge, as well as general scientific and special methods, was used. Using the historical-retrospective method, the regulatory and legal support for implementing the state policy on the socio-economic development of rural areas was investigated. In order to assess the state and trends of rural development in Ukraine, economic and statistical methods are used in analytical studies (comparative analysis to compare the results obtained in individual years, average and relative values, trend analysis, index analysis, etc.). This was done to establish certain relationships, such as identity, similarity, or difference between characteristics and facts.

Multiple correlation and regression analysis was used to determine the influence of individual factors on the efficiency of functioning and financial capacity of territorial communities. A number of abstract and logical techniques made it possible to formulate intermediate and final conclusions and proposals.

The methodology used in the study corresponds to the following steps (Figure 1).

The information base of the research was: data of the State Statistics Service of

Ukraine, the "Decentralization" portal, regulatory and legal acts of Ukraine; scientific publications; information from Internet resources. The research period covers 1990–2022.

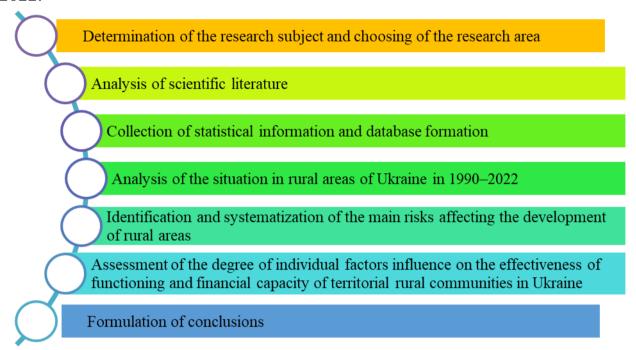


Figure 1. Logical scheme of research methodology

Source: generated by the authors.

However, although the qualitative and quantitative approaches used in the research to prepare this paper provide accurate measurements and comparisons, they cannot cover the full complexity of the research subject. This study provides important information about the main challenges and problems affecting the development of rural areas and communities, their financial capacity, but of course, it does not include the influence of many other potentially influential variables.

Results and discussion. Since 2014, the decentralization process began in Ukraine, the legislative framework for reforming the management of the socioeconomic development of the state was approved and is gradually being implemented, which provides for: 1) the transfer of most powers from executive authorities to the level of territorial communities and securing sufficient financial resources for them; 2) clear demarcation of powers between executive authorities and local self-government authorities, as well as among different levels of local authorities; 3) strengthening the responsibility of local self-government authorities and officials to voters and the state.

In particular, the Concept of reforming local self-government and territorial organization of power in Ukraine was developed, adopted and implemented [45], the Laws of Ukraine "On cooperation of territorial communities" [46], "On the voluntary association of territorial communities" [47] and a number of amendments to the Budget and Tax Codes – regarding financial decentralization, etc. were adopted. The goal of the reform was defined as "... the formation of effective local self-government and territorial organization of power to create and maintain a full-fledged living

environment for citizens, provide high-quality and accessible public services, establish institutions of direct people's power, coordinate the interests of the state and territorial communities" [45].

During these years of reform, as of now, 1,470 territorial communities (rural, township and urban, including the city of Kyiv) were formed, of which 627 rural communities or 42.7 % of the total number, where more than 30 % of Ukraine's population (rural people) lives. However, based on the results of the research presented below in the paper, it is proved that the administrative-territorial reform, unfortunately, did not improve the situation in rural areas, in particular, the well-being and quality of life of rural residents. Its ineffectiveness led to the current crisis phenomena in rural areas.

This crisis is manifested primarily in a sharp decline in employment and an increase in such phenomena as unemployment and poverty, and in the search for a way out of them — mass migration of peasants, especially rural youth. As a result, further strengthening of these negatives leads to rural depopulation, which today has covered the whole of Ukraine, a sharp reduction of the population, including economically active one, in rural settlements, and, as a result, economic degradation of rural areas as a whole.

Thus, according to official statistical data of the State Statistics Service of Ukraine [48], for the period 2000–2021, the number of settlements in Ukraine decreased by 370 villages, an average of 17–18 villages annually. At the beginning of 2022, 12,473,600 rural people lived in Ukraine (excluding the temporarily occupied territory of the Autonomous Republic of Crimea and part of the temporarily occupied territories in the Donetsk and Luhansk regions), which was 30.3 % of the total population of the country. Compared to 1990, the rural population decreased by 4,495.7 thousand people, or by 26.5 %. At the same time, the rural population decreased by almost half in Chernihiv region – by 49.6 %, Sumy region – 41.5, Khmelnytskyi region – 34.1, Poltava region – 33.2, Zhytomyr region – 32.7 %.

The death rate in rural areas is 2.5 times higher than the birth rate. In 2021, the birth and death rates were 7.7 and 19.5 per 1,000 of the existing population, respectively.

The socio-demographic situation is also complicated by the fact that the population reproduction potential is practically exhausted in the Ukraine's rural areas. At the beginning of 2022, the number of people over 60 years old (3,048 thousand people) exceeded the number of children under the age of 14 by 1.5 times (2,075 thousand people – in 2021 alone, this contingent of the rural population decreased by 43 thousand people), and there were 3385.4 thousand people in the most productive reproductive age (20–39 years), which was only 27 % of the total number of Ukraine's rural population. In 2021 alone, this age group (20–39 years) decreased by 60,000 people, which was 0.5 % of the total rural population.

In turn, this fact proves that in the absence of able-bodied youth on the rural labor market, the rural able-bodied population is at a disadvantage compared to urban residents in terms of the quality of workforce (educational and qualification level,

professional skills, health status, etc.). As a result, this will significantly complicate the implementation of technical and technological changes in agricultural production and affect labor productivity.

In 2021, the employment rate of the rural population reached its lowest level since 2000-46.7 %. This is the lowest indicator of rural employment in the last 20 years. The unemployment rate of the rural population increased to 10.6 % in 2021, and among persons of working age – to 11.2 %.

It is clear that during the Russian-Ukrainian war, the situation worsened significantly. The lack of official statistics does not make it possible to assess the actual level of employment, but according to expert assessments, its decline is significant, and in some regions, even catastrophic.

Due to unemployment and the loss of peasants' opportunities to exercise their constitutional and normative right to work and commensurate payment for it, as a result of inflation, constant growth of prices and tariffs for social services, the purchasing power of rural residents decreases, the consumption of food products (in rural families in the general structure of total expenses for almost two decades, 53–67 % falls only on food products), industrial goods and services decreases, the cost of living of peasants is continuously increasing, and their standard of living is worsening.

The situation in providing villages with social infrastructure facilities is complicated. Over the past ten years, the number of secondary schools has decreased by 34.8 %. The number of hospitals decreased by 16.8 %, paramedics and midwives by 41.7 %, libraries by 13.6 %, club-type cultural institutions by 8.1 %. Although the number of pre-school children's institutions increased by 400 % during the analyzed period, the level of their provision remained quite low -33.6 %.

As of the end of 2022, 331 (22.5 %) territorial communities from nine regions were located in areas of military (combat) operations or under temporary occupation, encirclement (blockade). The settlement network in these territories is being destroyed. In the majority of cities, townships and villages that were or are in the zone of active hostilities, the production infrastructure and housing stock are destroyed partially, and in some places completely, housing communal enterprises are not operating, and engineering support is in poor condition. As a result, the attractiveness of the population's residence and the possibility of exercising employment rights have been almost completely lost. 105 of these 331 TCs are rural territorial communities.

Regulatory and legal support that regulates rural development, including the issues of sustainable development, has its history since the foundation of independent Ukraine and includes numerous legislative and regulatory documents. In particular, such as the Law of Ukraine "On the priority of social development of rural areas and agro-industrial complex in the national economy" dated October 17, 1990 No. 400-XII; Resolution of the Cabinet of Ministers of Ukraine "State target program on the development of Ukrainian rural areas for the period till 2015" dated July 19, 2007 No. 1158; Resolution of the Cabinet of Ministers of Ukraine "State strategy for

regional development for 2021–2027" dated August 5, 2020 No. 695; Order of the Ministry of Agrarian Policy of Ukraine "Industry program of socio-economic development of rural territorial communities" (model project "New rural community") dated June 01, 2010 No. 280, etc.

In 2015, the Ministry of Agrarian Policy and Food of Ukraine created a project of the "Unified comprehensive strategy for agriculture and rural development of Ukraine for 2015–2020", which outlined priority and long-term measures and expected results, deadlines for their implementation, as well as a detailed plan of actions and responsible performers. However, the document was never legitimized.

In order to create the necessary organizational, legal and financial prerequisites for rural development, the Decree of the Cabinet of Ministers of Ukraine "On approval of the Concept of rural development" dated September 23, 2015 No. 995-r and "On approval of the Plan of measures for the implementation of the Concept of rural development" dated July 19, 2017 No. 489-r were adopted. The implementation of the Concept is planned for the period until 2025.

Certain legislative measures to solve the problems of balanced economic, social and ecological development in Ukraine at the state level were reflected in the Order of the Cabinet of Ministers of Ukraine "Concept of the State target program for sustainable development of rural areas for the period until 2020" dated March 02, 2010 No. 121-r; Decrees of the President of Ukraine "On the sustainable development strategy "Ukraine – 2020" dated January 12, 2015 No. 5/2015 and "On the goals of sustainable development of Ukraine for the period until 2030" dated September 30, 2019 No. 722/2019.

However, the analysis proved that the peculiarities of regulatory and legal support for implementing the state policy on the socio-economic development of rural areas are that they are general in nature and do not contain specific mechanisms by which the state would clearly influence the functioning of the agricultural sector, which guarantees the food security of the country and ensure effective rural development; there is no financial support for the adopted normative acts in full or at all. In addition, some adopted acts are not executed.

The new regulatory documents also follow up on these shortcomings. In particular, the "National economic strategy for the period until 2030", approved by Resolution No. 179 of the Cabinet of Ministers of Ukraine dated March 3, 2021, one of the results of which should be the improvement of rural development and the quality of life in rural areas, currently does not have a Plan of measures for its implementation, and therefore monitoring and evaluation of the results achieved.

One of the priority areas defined by the "State strategy for regional development until 2027" (Resolution of the Cabinet of Ministers of Ukraine No. 695 of August 05, 2020) is the development of rural areas (within strategic goal 1, within which 17 tasks have been identified). However, there is no monitoring of the performance of these tasks. According to official statistics, the situation regarding social infrastructure in rural areas is not improving, but rather getting worse, access to medical and educational services has become difficult, in some cases impossible. This indicates

that the tasks defined in this resolution have not been fulfilled.

The situation is similar with regard to institutional support for rural development policy. In particular, among the committees of the Verkhovna Rada of Ukraine, there is not yet a single one that would be responsible for rural development policy [49].

On December 2, 2022, a new Ministry for Communities, Territories and Infrastructure Development of Ukraine was formed (on the basis of the Ministry of Infrastructure). The Regulations on its activities were approved by Resolution No. 1400 of the Cabinet of Ministers dated December 17, 2022. However, if earlier, in accordance with the legislation, the Ministry of Regions was assigned with the tasks of general coordination of rural development, elaboration and implementation of rural development programs, elaboration and implementation of measures aimed at comprehensive rural development, and submission of relevant proposals for consideration by the CMU; ensuring monitoring of the provision of social infrastructure facilities in rural areas, then in the Regulations of the Ministry for Communities, Territories and Infrastructure Development of Ukraine there is not a single word about rural areas and their development.

It is also worth paying attention to the fact that in the draft document "New agrarian policy" [50], there is no section or even a mention of rural development. This only shows that there is still no understanding of the importance of this problem at the state level and the need for a comprehensive approach to its solution.

Thus, it is reasonable to state that at the moment there are no strategic documents on rural development, no institutional support for it, no financial instruments for implementing the state policy of rural development and, in general, there is no proper understanding of the need for a comprehensive rural development policy (including in the context of European integration) at the political level.

In general, the main challenges and problems affecting the development of rural areas and communities in Ukraine should be identified and summarized into relevant groups (Table 1).

Each of these problems is already significant in itself, and their totality in a certain combination is a prerequisite for the emergence of a crisis in rural development and entails the destabilization of the entire national economic complex. At the same time, a clear identification of these problems is the basis for determining the main directions of reforming rural development in Ukraine and choosing instruments for its implementation.

However, it is worth noting that in the process of implementing the administrative and territorial reform in Ukraine, there are also positive changes. In particular, it is appropriate to note a certain effectiveness of financial decentralization, which theoretically can provide conditions for further socioeconomic development of rural TCs. One of the facts confirming this ability is data on financial revenues to local budgets. Thus, during 2014–2021, the TC's revenues increased by more than 4.6 times: from 68.6 billion UAH in 2014 to 317.1 billion UAH in 2021, which in turn contributed to an increase in the share of TC's revenues in local budget revenues by 41.4 percentage points up to 70.7 %.

Table 1

Systematization of rural development problems in Ukraine

Problem group	Components of the problem group
1 Toblem group	demographic situation crisis; negative sex-age structure and depopulation; high
g .	level of external and internal migration; increase in the number of internally
	·
Socio-	displaced persons as a result of hostilities in the country; impossibility of
demographic	employment and low income; unsatisfactory provision of social infrastructure,
	health care, education and culture, sports, household service institutions, their
	destruction as a result of military operations; unsatisfactory transport connections
	and low-quality roads
	unfavorable investment climate due to difficulties in attracting foreign and
	domestic investments in TC; narrow specialization of agricultural enterprises
	(mainly crop production); highly intensive development of agriculture, significant
	decline and unprofitability of livestock production (meat and dairy cattle breeding,
	pig breeding), as a labor-intensive industry; lack of a sufficient number of market-
Economic	forming enterprises; low purchase prices for the products of agricultural
	enterprises and households; inflated prices for material and technical resources;
	lack of developed transport infrastructure and its low availability; disruption of
	logistics chains and loss of markets for agricultural products due to military
	actions; insufficient state support for agricultural producers and lack of social
	protection and cooperation of households owners; monopolization of state support
	by large agricultural formations
F ' . 1	decrease in soil fertility and quality; non-compliance with scientifically based
Environmental	farming systems; irrational use of forest resources and uncontrolled logging and
and nature	harvesting; illegal and inefficient use of natural minerals; air and water pollution;
protection	unsolved problems of solid household waste and landfills arrangement; radiation
	pollution of rural areas in certain regions of Ukraine
	ineffective decentralization of management in rural areas; institutional activity and
	level of development of local development agencies of territorial communities that
	do not meet the requirements of the time; inefficient activity of institutions
	authorized by the state to implement measures in the field of management
Institutional	decentralization and support of TC; the general nature of regulatory and legal
1115 010 00 010 11 01	support for implementing the state policy on the socio-economic development of
	rural areas; insufficient financial support for adopted normative acts, inconsistency
	of individual regulatory procedures and normative legal acts that govern the local
	self-government authorities of territorial communities; the dominant destructive
	nature of the functioning of informal institutional levers of TC development
	Russian-Ukrainian war; political instability in the country; insufficiently balanced
Political	state migration, social, tax, foreign economic policies; lack of specific mechanisms
1 Ontical	by which the state would ensure effective rural development; low executive
	discipline
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Source: summarized by the authors based on the results of their own research.

The largest increase is shown by the actual receipt of personal income taxes. It would seem that one of the reasons for such growth was an increase in income due to creating new jobs and increasing employment in communities. However, according to official statistics on rural employment, the situation is the opposite, new jobs are not being created, instead existing ones are being eliminated, especially in agriculture, and the unemployment rate of the rural population is growing. At the initial stages of TC operation, including in rural areas, jobs were created only in such areas as provision of administrative services, medical, educational, social, etc.

At further stages of development and functioning of rural TCs, it is advisable to focus attention on attracting both own revenues and investments for developing the production and service sectors, in particular, non-agricultural industry, construction, transport, tourism and recreation, etc. An urgent need is that in the event of a reduction or termination of subventions from the state budget, the financial capacity of some rural TCs for sustainable socio-economic development may significantly decrease, which will lead to the reduction or elimination of existing jobs in the future.

In order to assess the effectiveness of financial decentralization and analyze the influence of factors, an economic-mathematical method was used, which made it possible to identify the relationship between the resulting characteristic and factor indicators. Multifactor correlation and regression analysis, which determines the dependence of the resulting characteristic on several factors, is one of the effective methodological approaches for assessing the influence of the system of factors on the efficiency of functioning and financial capacity of territorial communities.

Regional features of rural development in Ukraine in the context of decentralization were identified and disclosed on the example of the Volyn region. To this end, a statistical correlation and regression model was developed and a relationship between the amount of budget capital expenditures for financing investment and innovation activities of TC per 1 resident of the community and a number of financial and economic factors that reflect the income, expenses and level of rotation of territorial communities of the studied region was established. At the same time, the nature of the specified dependence, according to the research results, is direct. The following were selected as factor characteristics (Table 2).

Table 2
Factors influencing the resulting characteristic and the method of their quantitative measurement

Factors Indicators, method of their calculation Profitability of community lands, which is defined as the ratio of the payment for land to the community territory, UAH/ha Local taxes and fees, depending on the rates established by the Tax Code of Ukraine, the object of taxation, payment procedure and provided tax benefits, per 1 inhabitant, UAH Fiscal return of the territory (the ratio of revenues of the general fund to the community territory), per 1 inhabitant, UAH Expenditures of the general fund, including expenditures for implementing delegated and own powers and interbudgetary transfers to other budgets, per 1 inhabitant, UAH Total revenues to the general fund (tax and non-tax payments, as well as local taxes and fees), per 1 inhabitant, UAH Expenses for the maintenance of management personnel and local self-government authorities, per 1 inhabitant, UAH Basic (reverse) subsidy is a transfer provided from the state budget to local budgets for the horizontal equalization of the fiscal capacity of territories, per 1 inhabitant, UAH Official transfers from state authorities (subsidies, targeted and investment subventions, etc.), per 1 inhabitant, UAH		*					
to the community territory, UAH/ha Local taxes and fees, depending on the rates established by the Tax Code of Ukraine, the object of taxation, payment procedure and provided tax benefits, per 1 inhabitant, UAH Fiscal return of the territory (the ratio of revenues of the general fund to the community territory), per 1 inhabitant, UAH Expenditures of the general fund, including expenditures for implementing delegated and own powers and interbudgetary transfers to other budgets, per 1 inhabitant, UAH Total revenues to the general fund (tax and non-tax payments, as well as local taxes and fees), per 1 inhabitant, UAH Expenses for the maintenance of management personnel and local self-government authorities, per 1 inhabitant, UAH Basic (reverse) subsidy is a transfer provided from the state budget to local budgets for the horizontal equalization of the fiscal capacity of territories, per 1 inhabitant, UAH Official transfers from state authorities (subsidies, targeted and investment	Factors	Indicators, method of their calculation					
Local taxes and fees, depending on the rates established by the Tax Code of Ukraine, the object of taxation, payment procedure and provided tax benefits, per 1 inhabitant, UAH Fiscal return of the territory (the ratio of revenues of the general fund to the community territory), per 1 inhabitant, UAH Expenditures of the general fund, including expenditures for implementing delegated and own powers and interbudgetary transfers to other budgets, per 1 inhabitant, UAH Total revenues to the general fund (tax and non-tax payments, as well as local taxes and fees), per 1 inhabitant, UAH Expenses for the maintenance of management personnel and local self-government authorities, per 1 inhabitant, UAH Basic (reverse) subsidy is a transfer provided from the state budget to local budgets for the horizontal equalization of the fiscal capacity of territories, per 1 inhabitant, UAH Official transfers from state authorities (subsidies, targeted and investment	24.	Profitability of community lands, which is defined as the ratio of the payment for land					
the object of taxation, payment procedure and provided tax benefits, per 1 inhabitant, UAH Fiscal return of the territory (the ratio of revenues of the general fund to the community territory), per 1 inhabitant, UAH Expenditures of the general fund, including expenditures for implementing delegated and own powers and interbudgetary transfers to other budgets, per 1 inhabitant, UAH Total revenues to the general fund (tax and non-tax payments, as well as local taxes and fees), per 1 inhabitant, UAH Expenses for the maintenance of management personnel and local self-government authorities, per 1 inhabitant, UAH Basic (reverse) subsidy is a transfer provided from the state budget to local budgets for the horizontal equalization of the fiscal capacity of territories, per 1 inhabitant, UAH Official transfers from state authorities (subsidies, targeted and investment	χ_I	to the community territory, UAH/ha					
Fiscal return of the territory (the ratio of revenues of the general fund to the community territory), per 1 inhabitant, UAH Expenditures of the general fund, including expenditures for implementing delegated and own powers and interbudgetary transfers to other budgets, per 1 inhabitant, UAH Total revenues to the general fund (tax and non-tax payments, as well as local taxes and fees), per 1 inhabitant, UAH Expenses for the maintenance of management personnel and local self-government authorities, per 1 inhabitant, UAH Basic (reverse) subsidy is a transfer provided from the state budget to local budgets for the horizontal equalization of the fiscal capacity of territories, per 1 inhabitant, UAH Official transfers from state authorities (subsidies, targeted and investment		Local taxes and fees, depending on the rates established by the Tax Code of Ukraine,					
Fiscal return of the territory (the ratio of revenues of the general fund to the community territory), per 1 inhabitant, UAH Expenditures of the general fund, including expenditures for implementing delegated and own powers and interbudgetary transfers to other budgets, per 1 inhabitant, UAH Total revenues to the general fund (tax and non-tax payments, as well as local taxes and fees), per 1 inhabitant, UAH Expenses for the maintenance of management personnel and local self-government authorities, per 1 inhabitant, UAH Basic (reverse) subsidy is a transfer provided from the state budget to local budgets for the horizontal equalization of the fiscal capacity of territories, per 1 inhabitant, UAH Official transfers from state authorities (subsidies, targeted and investment	x_2	the object of taxation, payment procedure and provided tax benefits, per 1 inhabitant,					
territory), per 1 inhabitant, UAH Expenditures of the general fund, including expenditures for implementing delegated and own powers and interbudgetary transfers to other budgets, per 1 inhabitant, UAH Total revenues to the general fund (tax and non-tax payments, as well as local taxes and fees), per 1 inhabitant, UAH Expenses for the maintenance of management personnel and local self-government authorities, per 1 inhabitant, UAH Basic (reverse) subsidy is a transfer provided from the state budget to local budgets for the horizontal equalization of the fiscal capacity of territories, per 1 inhabitant, UAH Official transfers from state authorities (subsidies, targeted and investment		UAH					
Expenditures of the general fund, including expenditures for implementing delegated and own powers and interbudgetary transfers to other budgets, per 1 inhabitant, UAH Total revenues to the general fund (tax and non-tax payments, as well as local taxes and fees), per 1 inhabitant, UAH Expenses for the maintenance of management personnel and local self-government authorities, per 1 inhabitant, UAH Basic (reverse) subsidy is a transfer provided from the state budget to local budgets for the horizontal equalization of the fiscal capacity of territories, per 1 inhabitant, UAH Official transfers from state authorities (subsidies, targeted and investment		Fiscal return of the territory (the ratio of revenues of the general fund to the community					
and own powers and interbudgetary transfers to other budgets, per 1 inhabitant, UAH Total revenues to the general fund (tax and non-tax payments, as well as local taxes and fees), per 1 inhabitant, UAH Expenses for the maintenance of management personnel and local self-government authorities, per 1 inhabitant, UAH Basic (reverse) subsidy is a transfer provided from the state budget to local budgets for the horizontal equalization of the fiscal capacity of territories, per 1 inhabitant, UAH Official transfers from state authorities (subsidies, targeted and investment	<i>X</i> ₃	territory), per 1 inhabitant, UAH					
Total revenues to the general fund (tax and non-tax payments, as well as local taxes and fees), per 1 inhabitant, UAH Expenses for the maintenance of management personnel and local self-government authorities, per 1 inhabitant, UAH Basic (reverse) subsidy is a transfer provided from the state budget to local budgets for the horizontal equalization of the fiscal capacity of territories, per 1 inhabitant, UAH Official transfers from state authorities (subsidies, targeted and investment		Expenditures of the general fund, including expenditures for implementing delegated					
and fees), per 1 inhabitant, UAH Expenses for the maintenance of management personnel and local self-government authorities, per 1 inhabitant, UAH Basic (reverse) subsidy is a transfer provided from the state budget to local budgets for the horizontal equalization of the fiscal capacity of territories, per 1 inhabitant, UAH Official transfers from state authorities (subsidies, targeted and investment	χ_4	and own powers and interbudgetary transfers to other budgets, per 1 inhabitant, UAH					
Expenses for the maintenance of management personnel and local self-government authorities, per 1 inhabitant, UAH Basic (reverse) subsidy is a transfer provided from the state budget to local budgets for the horizontal equalization of the fiscal capacity of territories, per 1 inhabitant, UAH Official transfers from state authorities (subsidies, targeted and investment		Total revenues to the general fund (tax and non-tax payments, as well as local taxes					
authorities, per 1 inhabitant, UAH Basic (reverse) subsidy is a transfer provided from the state budget to local budgets for the horizontal equalization of the fiscal capacity of territories, per 1 inhabitant, UAH Official transfers from state authorities (subsidies, targeted and investment	x_5	and fees), per 1 inhabitant, UAH					
Basic (reverse) subsidy is a transfer provided from the state budget to local budgets for the horizontal equalization of the fiscal capacity of territories, per 1 inhabitant, UAH Official transfers from state authorities (subsidies, targeted and investment		Expenses for the maintenance of management personnel and local self-government					
the horizontal equalization of the fiscal capacity of territories, per 1 inhabitant, UAH Official transfers from state authorities (subsidies, targeted and investment	χ_6	authorities, per 1 inhabitant, UAH					
Official transfers from state authorities (subsidies, targeted and investment		Basic (reverse) subsidy is a transfer provided from the state budget to local budgets for					
r_0	χ_7	the horizontal equalization of the fiscal capacity of territories, per 1 inhabitant, UAH					
r_0		Official transfers from state authorities (subsidies, targeted and investment					
	x_8	subventions, etc.), per 1 inhabitant, UAH					

Source: generated by the authors.

The indicators were determined based on statistical data characterizing the level of development of 54 TCs of the Volyn region in 2022, as well as the author's research and calculations. A number of indicators were calculated based on the information and analytical dashboard "Municipality budgets in Ukraine", which visualizes the resulting characteristics of the budgets of all territorial communities of Ukraine by income, expenses and transfers for 2022 [51]. It should be noted that this is a new instrument for budget analysis at the local level, the indicators are regularly updated, contain minimum, maximum and average values of the above indicators and can be used for detailed economic and financial diagnostics of TC budgets, identifying shortcomings and developing proposals to improve the financial capacity of communities in the future. The initial data for building the model are shown in Table 3.

Table 3
Input data for the model construction

input data for the model construction										
No. Territorial Y Factor characteristics										
NO.	community	1	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8
1	VolVolynska	3,587	171,901	1,159	259	10,008	25,393	982	0	1,958
2	Zaturtsivska	57	12,655	1,314	11	9,090	3,914	1,919	1,212	5,325
3	Zymnenska	493	21,061	1,585	13	9,846	4,215	1,269	1,411	5,435
4	Ivanychivska	85	43,880	1,194	43	8,367	4,314	1,057	1,102	3,993
5	Lytovezka	131	17,843	1,153	33	6,791	4,180	1,544	158.9	3,042
6	Lokachynska	410	23,365	1,351	15	9,638	5,391	1,160	980.2	4,529
7	Novovolynska	744	243,090	1,280	67	7,291	5,042	833	776.6	2,530
8	Ovadnivska	511	21,693	2,073	21	10,914	7,471	1,556	829.7	4,935
9	Pavlivska	141	21,939	1,220	13	9,018	3,236	1,261	1,484	2,552
10	Poromivska	105	14,465	944	68	8,904	7,479	1,340	0	3,628
11	Ustyluzka	206	11,995	1,580	15	9,518	6,298	1,502	52.48	3,347
12	KamKashyrska	373	5,223	707	2	9,310	3,384	516	1,702	6,307
13	Lyubeshivska	348	10,502	802	3	8,931	3,298	817	1,382	6,223
14	Manevytska	399	6,223	892	5	9,211	5,001	825	940.8	5,113
15	Prylisnenska	239	11,902	1,161	9	9,196	4,498	1,001	1,294	6,156
16	Soshynetska	238	4,273	684	6	8,548	2,270	841	2,073	7,109
17	Velymchenska	169	7,969	441	19	8,642	7,147	677	2,137	7,034
18	Velytska	443	11,106	994	13	8,177	2,823	1,443	1,740	5,954
19	Vyshnivska	740	13,519	1,499	14	11,210	7,090	1,429	176.4	4,672
20	Holobska	240	19,524	1,258	12	8,420	3,753	1,378	1,388	7,816
21	Holovnenska	353	4,635	464	6	7,026	1,938	583	1,367	5,248
22	Dubechnenska	144	8,232	536	8	8,665	2,577	671	1,784	6,256
23	Dubivska	975	16,937	1,993	28	13,140	5,346	1,511	1,129	8,141
24	Zabolotivska	314	7,101	482	9	7,945	2,399	768	1,832	5,285
25	Zabrodivska	185	5,224	484	6	8,402	1,997	613	1,983	6,735
26	Kovelska	934	313,711	2,762	26	9,180	8,220	977	224.6	2,782
27	Kolodiazhnenska	620	7,222	1,142	8	10,058	3,904	1,609	1,603	6,523
28	Lukivska	138	20,128	1,286	35	8,193	5,497	873	1,361	4,285
29	Lublynetska	155	21,166	1,081	38	7,986	4,389	918	1,405	4,329
30	Lubomlska	840	29,574	1,724	20	10,487	5,773	1,239	1,008	4,285
31	Povorska	314	7,102	784	16	9,159	4,041	1,157	1,580	5,700
32	Ratnivska	896	9,487	815	11	9,405	5,250	794	1,226	5,306
33	Rivnenska	594	7,442	989	15	9,985	5,397	1,202	995.5	5,218

								Contin	uation oj	f Table 3
No.	Territorial Y Fact					ctor characteristics				
NO.	community	1	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8
34	Samarivska	337	5,178	632	17	10,216	4,279	1,842	1,919	7,325
35	Serehovychivska	93	17,074	1,240	18	7,133	3,067	1,531	1,819	4,778
36	Smidynska	910	13,524	1,066	14	6,961	3,110	947	1,591	5,139
37	Starovyzhivska	62	10,338	843	9	8,697	3,650	1,035	1,143	4,794
38	Turiiska	370	15,834	1,517	5	9,860	4,789	1,165	881.9	4,928
39	Shatska	468	8,694	1,089	8	9,901	6,275	1,264	969.8	4,711
40	Berestechkivska	197	25,372	1,106	13	6,860	2,999	947	1,088	3,639
41	Boratynska	337	41,330	2,548	48	12,817	13,801	1,673	0	4,444
42	Horodyschenska	515	26,952	1,562	22	9,480	5,206	1,294	557.1	3,988
43	Horohivska	192	16,874	1,162	9	8,180	4,386	1,173	519.6	3,676
44	Dorosynivska	147	7,618	660	7	6,236	1,735	1,276	1,559	4,810
45	Kivertsivska	1,824	26,842	1,405	31	10,483	14,933	1,069	645.9	4,437
46	Kolkivska	215	8,201	680	3	7,297	2,422	566	1,451	5,505
47	Kopachivska	28	17,835	1,030	17	7,850	3,060	1,038	1,329	5,054
48	Lutska	836	392,419	2,246	27	10,069	10,347	954	0	2,316
49	Maryanivska	103	17,515	1,033	10	6,867	2,336	866	1,643	4,495
50	Olytska	170	30,049	1,171	12	7,662	3,066	1,070	1,336	4,870
51	Lypynska	1,216	19,830	2,285	42	14,067	12,335	2,723	0	2,569
52	Rozhyshchenska	329	30,906	1,128	9	8,043	3,984	739	923.7	4,029
53	Torchynska	581	22,557	1,163	19	8,596	5,548	1,213	606.9	4,360
54	Tsumanska	188	6,841	597	6	7,876	2,505	609	1,367	5,906

Source: formed by the authors based on data from the Information and Analytical Dashboard "Municipality budgets in Ukraine" [51].

Since such factors as the receipt of funds to the general fund, land profitability, the amount of local taxes and fees, fiscal return of the territory, general fund expenses, expenses for the maintenance of management personnel, the size of basic subsidies and official transfers have a direct impact on the volume of capital expenditures, so the relationship between the resulting and factor indicators can be expressed using the following regression equation:

$$Y_x = a_0 + a_1 x_1 + a_2 x_2 + \dots + a_n x_n, \tag{1}$$

where Y_x – the dependent variable (resulting characteristic – budget capital expenditures for financing investment and innovation activities of communities per 1 inhabitant, UAH);

 a_0 – the beginning of the countdown, which has no economic meaning;

 a_1 , $a_2 a_n$ – regression coefficients;

 x_1 , x_2 , x_n – factors.

Based on the results of data processing using the *STATISTICA* application package, a corresponding correlation matrix was obtained, which represents the values of the correlation coefficients for the above variables (Table 4).

The calculated correlation coefficients are in the range from +1.0 to -1.0 and show both a positive and a negative relationship between the selected factors that affect the amount of TC budget capital to finance their investment and innovation activities. So, for example, the indicator of TC general fund expenditures, including expenses for implementing delegated and own powers and interbudgetary transfers to

other budgets (X_4) is directly and closely dependent on revenues to the general fund, which are formed on the basis of tax and non-tax payments, as well as local taxes and fees (X_5) , since the correlation coefficient is 0.804598.

Table 4
Correlation matrix of identified relationships between factors influencing capital expenditures of the TC budget, per 1 inhabitant

Indi- cator	X_{I}	X_2	X_3	X_4	X_5	X_6	<i>X</i> ₇	X_8
X_I	1.000000	0.504404	0.376855	0.059530	0.413029	-0.10350	-0.44258	-0.52272
X_2	0.504404	1.000000	0.169086	0.607523	0.476771	0.527088	-0.67064	-0.44173
X_3	0.376855	0.169086	1.000000	0.173412	0.804598	0.077514	-0.43661	-0.44959
X_4	0.059530	0.607523	0.173412	1.000000	0.552173	0.562774	-0.42954	0.023713
X_5	0.413029	0.476771	0.804598	0.552173	1.000000	0.255246	-0.64632	-0.45671
X_6	-0.10350	0.527088	0.077514	0.562774	0.255246	1.000000	-0.37423	-0.14132
X_7	-0.44258	-0.67064	-0.43661	-0.42954	-0.64632	-0.37423	1.000000	0.709582
X_8	-0.52272	-0.44173	-0.44959	0.023713	-0.45671	-0.14132	0.709582	1.000000

Source: authors' own calculations.

The resulting linear regression equation is an equation of a straight line, approximating relationship between the resulting characteristic and the factors selected for the correlation and regression analysis:

$$Y = -557.667 + 0.000821x_1 - 0.06272x_2 + 4.281283x_3 + 0.046553x_4 + 0.090195x_5 - 0.09844x_6 + 0.133143x_7 + 0.00837x_8$$
 (2)

The calculated regression coefficients ($a_1 = 0.000821$, $a_2 = -0.06272$, $a_3 = 4.281282$, $a_4 = 0.046553$, $a_5 = 0.090195$, $a_6 = -0.09844$, $a_7 = -0.133143$, $a_8 = 0.00837$) show how much capital expenditures from the TC budget per 1 inhabitant will change on average under changes in each factor per unit of its measurement at fixed values of the rest of the factors entered in the equation. It follows from the regression equation that of the factors considered, the level of capital expenditures is most affected by the fiscal return of the community territory per 1 inhabitant.

Emphasis on the indicator of the fiscal return of the territory and the share of local taxes and fees in the composition of local budget revenues is a positive aspect, because the authority to establish rules for collecting such taxes has been transferred to the local level. According to scientists of the State Institution "M. I. Dolishniy Institute of Regional Research of the NAS of Ukraine", considering these factors will reveal the effectiveness of using the opportunities provided to them by local self-government authorities [52].

It is worth noting that there is a fairly close relationship between the selected factors and the resulting characteristic, as evidenced by the value of the multiple correlation coefficient R = 0.8710 (Table 5).

Fluctuations in the volume of budget capital expenditures per 1 inhabitant depend by 75.87 % on the factors included in the regression equation (coefficient of multiple determination $R^2 = 0.7587$). The degree of change in the volume of capital expenditures per 1 TC inhabitant when a certain factor changes by a unit of its measurement, provided

that the values of other factors included in the equation are fixed, is determined by the value of the regression coefficients. Thus, an increase in the fiscal return of the community territory by 1 UAH per inhabitant will contribute to the growth of capital expenditures by 4.28 UAH. An increase in expenses for the maintenance of management personnel per 1 resident by 1 UAH will lead to a decrease in capital expenditures by 0.09 UAH per 1 person.

Table 5
Results of the multifactorial regression dependence of TC capital expenditures of the Volyn region per 1 inhabitant, 2022

or the voly in region per 1 initiative in 2022							
Resulting characteristic and factor indicators, coefficients and criteria	Indicators, their calculation method and values						
Resulting characteristic – Y	Budget capital expenditures for financing investment and innovation activities of communities per 1 inhabitant, UAH						
Regression model	$Y = -557.667 + 0.000821x_1 - 0.06272x_2 + 4.281283x_3 + 0.046553x_4 + 0.090195x_5 - 0.09844x_6 + 0.133143x_7 + 0.00837x_8$						
Multiple correlation coefficient	R = 0.871013						
Coefficient of multiple determination	$R^2 = 0.871013^2 = 0.758664$						
Normalized coefficient of multiple determination	$R_d = 0.715760$						
Fisher's test	F_{fact} (5; 10) = 17.68; F_{theor} (5; 10; 0.95) = 3.33 $F_{fact} > F_{theor}$						

Source: authors' own calculations.

To determine the reliability of the correlation ratio, Fisher's F-test was used (Table 5). Its calculated actual value (17.68) is higher than the tabulated value (3.33), which ensures the reliability of the correlation ratio. In order to obtain a qualitative regression model and its corresponding description, calculations were made to identify the effect of multicollinearity using the Farrar-Glauber algorithm. The existence of such a phenomenon in statistical science as multicollinearity often leads to the selection of incorrect model indicators, and if they are transferred to the general population, an unreliable picture of the consequences of decentralization transformations that take place in rural areas can be obtained. The above does not allow to effectively solve the identified problems. The calculations confirmed the absence of a multicollinearity effect.

Of course, the situation in individual rural communities of the Volyn region is significantly different, which is due to natural-climatic and organizational-economic conditions, and requires an immediate response. For example, the land profitability of the Soshynetska rural territorial community in 2022 was 4,273 UAH/ha, and that of the Horodyschenska TC – 26,952 UAH/ha. At the same time, the average value for rural TCs in the region is 9,635 UAH/ha. But all communities have shown that they are able to effectively manage and increase the financial resources received, respond decently to unforeseen challenges and ensure a high level of service provision in any conditions, as well as quickly adapt to new conditions. The communities proved that local self-government budgets form the basis of the sustainability of local financial

resources and socio-ecological and economic development of the territory as a whole.

It is worth noting that, in accordance with the requirements of Articles 98-100 and Clause 24 of Chapter VI "Final and transitional provisions" of the Budget Code of Ukraine, in 2022 the system of budget equalization continued to operate, which provides for the horizontal equalization of the fiscal capacity of Ukrainian territories depending on the level of income per inhabitant [53]. At the same time, horizontal equalization for local self-government budgets is carried out only by personal income tax. When performing equalization, the value of the fiscal capacity index of the corresponding local budget is taken into account. So, in accordance with part 3 of Art. 99 of the Budget Code of Ukraine [53], the horizontal equalization mechanism provides that if the value of the fiscal capacity index is between 0.9 and 1.1, equalization is not carried out; local budgets with an index below 0.9 of the average indicator for Ukraine receive a basic subsidy to increase the level of their budget security, on the other hand, local budgets with a fiscal capacity index above 1.1 transfer part of their budget resources to support less capable communities. As of January 1, 2023, in the Volyn region, territorial communities received a basic subsidy totaling 754.82 million UAH, which is by 42.17 million UAH more than in 2021, and four communities directed a reverse subsidy to the State Budget of Ukraine. In 2022, funds were returned to the Budget in the amount of: Boratynska TC – 204.9 UAH per 1 inhabitant; Lypinska – 150.9 UAH; Lutska – 65.53 UAH; Volodymyr-Volynska – 62.25 UAH per 1 inhabitant.

In the context of this study, it is appropriate to examine and implement the European experience of fiscal equalization of TC budgets based on the transfer of financial resources between subregional authorities in order to mitigate regional differences in fiscal capacity and spending needs. After all, if we compare the estimated amounts of financial resources that are allocated or withdrawn from the budgets of Ukrainian territorial communities in accordance with horizontal equalization and actual revenues, we can often see their inconsistency. Table 6 shows the indicators that are taken into account when carrying out fiscal equalization of capacity in some European countries.

The main function of the system of fiscal equalization of budgets in European countries is to correct inequalities that would otherwise prevent comparable access to public services at the local level.

Therefore, the verification of the model based on the application of coefficients of multiple correlation, multiple determination, as well as Fisher's test proves its adequacy to the methodological instruments for studying the effectiveness of decentralization transformations in rural areas and confirms the feasibility of using it. After all, the scientifically based application of the correlation and regression method involves an in-depth analysis of the financial and economic indicators of specific communities, reflecting the size of their revenues and costs, the identification of cause-and-effect relationships between the socio-economic potential of the community and its investment and innovation development. However, given the scope of our research and available resources, we were limited to assessing the

financial capacity of rural territorial communities within one region (Volyn region), which may not fully reflect national trends and processes. Thus, the generalizability of the results may be limited.

Table 6 European experience of fiscal equalization of territorial community budgets

<u> </u>	an onperience	or riscar equ	tuileution of ter	11001101 0011	infulfity budgets
Country	Overall classification	Size (equalizing transfers % of government expenditure)	Horizontality (horizontal transfers % of total equalizing transfers)	Complexity (number of equalizing transfers)	Equalization rate (extent to which equalization fills a gap for SCGs below mean fiscal capacity)
Germany	Revenue	8.7	9.0	4	60.0–70.0 %
Lithuania	Revenue/Cost	2.2	100.0	2-part transfer (revenue and cost component)	80.0 %
Estonia	Revenue/Cost	1.3	no data	2	90.0 %
Italy	Gap-filling	0.7	no data	1	60.0 % from 2021, increasing by 5.0 % each year to reach 100.0 % in 2029
Spain	Gap-filling	4.0	27.0	4	no data
Ireland	Gap-filling	1.7	48.0	2	Topped-up to baseline funding requirement
Norway	Revenue/Cost	1.3	50.0	4	Municipalities: 60.0 % + an additional 35.0 % for municipalities with per capita revenues below 90.0 % of the mean
Sweden	Revenue/Cost	4.4	10.0 % of municipalities	2 for munici- palities	For the revenue component: 95.0 % for municipalities, 95.0 % for the subnational level
Switzerland	Revenue/Cost	2.0	34.0	3	86.5 %

Source: compiled by the authors based on data [54].

However, it is reasonable to say that in modern conditions, the new scales, structure and level of powers of rural communities require a review of the structure and volume of their budget revenues, development of industrial and social infrastructure, optimization of management costs, search for additional sources of capital investment and financing of development programs in order to ensure the interests of new, more structured and numerous communities.

Overcoming negative problems in the society of Ukrainian rural areas and on their territories is possible only under the condition of stable minimization of risks, first of all, the cessation of hostilities. As well as the implementation of economic measures, improving the financial prosperity of local budgets for social

reconstruction and further development of rural communities and territories. In this context, it is necessary to develop a real policy of the socio-economic development of rural areas on the basis of sustainability and taking into account European integration processes. To this end, we consider it expedient to make changes to the resolution of the Verkhovna Rada of Ukraine "On the list, quantitative composition and subjects of assignment of the committees of the Verkhovna Rada of Ukraine of the ninth convocation" dated August 29, 2019 No. 19-IX, including the policy of rural development in the subjects of assignment of the committees of the Verkhovna Rada of Ukraine, and define (appoint) a separate committee that would deal with its development.

It is expedient to determine the structure and content of the new policy and strategy for the socio-economic development of rural areas in the post-war period, taking into account European integration and the need to harmonize policies. In order to implement this task, we consider it necessary to create a separate working subgroup on rural development within the existing working group "New agrarian policy", and include a section in the project of the Recovery Plan of Ukraine "New agrarian policy" that will define rural development measures on a priority basis. At the same time, the strategic goals of the new agrarian policy should be defined as the "development of rural society and guaranteeing a high quality of life and well-being of the rural population of Ukraine; ensuring the development of a socially necessary, competitive and ecologically safe for the population economy of agricultural production; maintaining ecological balance with mandatory consideration of the balanced use of natural resources in rural areas by eliminating the identified problems and increasing the existing potential in the context of decentralization, European integration and on the basis of sustainability".

The primary priority is to determine the institutions responsible for developing and implementing the rural development policy and improve the coordination of efforts among them, establish their effective interaction with territorial communities. The creation of an effective institutional environment for rural development should be carried out at all levels: state, sectoral, industrial, public. At each of these levels, the competences, tasks and limits of responsibility of the relevant subjects participating in the process should be defined in order to avoid duplication of efforts and resource expenditure. It is important in the context of creating an efficient institutional environment to strengthen cooperation and partnership among all state and non-state institutions of rural development.

Further decentralization of socio-economic development processes should take place with the shift of the management center for rural development from the macroto micro-level and the maximum approximation of the government to each peasant.

In the context of further reforming the revenue capacity of local budgets of rural territorial communities, it is appropriate to consider the possibility of taking into account the horizontal equalization of some costs in the formula. It is precisely non-targeted equalizing transfers that can provide local authorities in rural areas with greater fiscal autonomy.

Theoretical, methodological and practical aspects of the influence of administrative-territorial reform and local self-government reform on rural development, identification of problems in rural areas, including those caused by decentralization, and the search for solutions are discussed in numerous scientific publications [29–32; 39–40; 55–62]. At the same time, most of the results published in these papers correspond to the results obtained in this study. In particular, as regards the ineffectiveness of the administrative and territorial reform in Ukraine. Thus, considering decentralization to be one of the priority, strategically important tasks of Ukraine as a democratic, social and legal state that has declared a course towards European integration, M. Logvynenko and A. Tsymbal [55] nevertheless point to problematic aspects in the implementation of the reform. Namely: the lack of a proper mechanism of legal regulation; non-compliance of the publicly announced goals of the decentralization reform with the real actions of the authorities within the framework of the reform; the irrationality of uniting some territorial communities, etc. At the same time, N. Davydenko and his colleagues [56], during an empirical study of rural development in Ukraine on the basis of the Rural Development Index developed by them, also came to the conclusion that the target indicators of decentralization for rural development in Ukraine were not achieved and there are no prospects for achieving them in the near future. M. Dmytryshyn and his colleagues point out the lack of strong evidence of the success of the decentralization reform and the decrease in the level of support for the decentralization reform both at the country level and across regions [57].

The conclusion of the authors of this paper about the decline in the quality of life of the rural population, caused, among other things, by decentralization and administrative and territorial reforms, is confirmed by Yu. Kurilov [58]. In his opinion, decentralization can be accompanied by such phenomena as regionalization of some territories (enrichment and consolidation of the territory within its historical, economic, territorial boundaries), and peripheralization of other territories (their impoverishment and atomization).

The predominance of political ambitions and interests over economic and social factors, as it turned out, is characteristic not only for Ukraine, but also for other countries that went through power decentralization and local self-government reform. Thus, M. Pūķis and L. Seimuškāne [59] presented a study showing that in Latvia, the true goals of the administrative-territorial reform were an expression of political competition. At the same time, no positive impact on regional development was achieved as a result of the reform. This is also confirmed by our research on Ukraine.

M. Al-Saidi [60], while studying the urban water sector reform program in Yemen, concludes that ambitions in its implementation led to institutional conflicts and hasty decentralization without any regulatory measures. Although this study concerns only one area of community functioning, namely water supply and drainage, the conclusions made in the paper are quite typical for the Ukrainian decentralization reform and its impact on rural development. The main factors that led to negative results, according to the authors, were related to the time frame for implementing the

reform, incorrectly defined criteria for independence, geographical boundaries of independent utility companies, and the expected wide participation of interested parties. This is currently typical for Ukraine and confirms the conclusions drawn in this work.

The results regarding financial decentralization in Ukraine [61] were also confirmed, namely the inability of budget equalization mechanisms to regulate the uneven development of territorial communities and the inability of local self-government authorities to carry out their powers in the absence of their own financial resources. Y. Uzun and S. Koch came to similar conclusions in their research [62]. Thus, they claim that financial decentralization did not contribute to the budgetary independence of communities and did not ensure the balance of inter-budgetary relations.

However, the literature sources reviewed above do not reflect the results of this study, as the most significant statistical relationship between the level of capital expenditures and the fiscal return of the community territory per 1 resident is determined. This, in our opinion, is a positive aspect due to the fact that, according to the reform, the authority to establish rules for collecting such taxes has been transferred to the local level.

It is noteworthy that the largest increase in financial revenues to local budgets of rural TCs is due to the receipt of personal income taxes. This issue, in our opinion, requires a separate study. After all, the logical conclusion is that this increase was the result of creating new jobs and increasing employment of the rural population. However, we are currently observing the opposite trends – employment is declining, and the unemployment rate of the rural population is growing. Obviously, there are other factors that affect this indicator, for example, an increase in the wages of agricultural workers. Therefore, in our opinion, it is advisable to direct further research, firstly, to collecting data for a longer period of time, and secondly, considering other factors that may affect the increase in financial revenues to local budgets of rural TCs and, accordingly, their expenditure part, and thirdly, expanding the range of TCs studied.

Conclusions. Summarizing the research results, the following conclusions can be drawn.

1. It is proved that the strategic goal of the administrative-territorial reform for rural development in TC is aimed at creating a quality living environment, increasing the employment level, increasing the competitiveness and financial stability of communities, preserving the environment and traditional rural landscapes, producing high-quality agricultural products, raw materials and food products, meeting the needs of the population and ensuring the provision of a wide range of social services has not yet been achieved. The social crisis continues to worsen, which is manifested in declining employment rates, increasing unemployment, rising poverty, mass migration of peasants, deterioration of infrastructure and access to social services. Thus, the paper confirmed the working hypothesis about the inefficiency of the administrative-territorial reform and its negative impact on rural development in

Ukraine.

- 2. During the period 2000–2021, the number of settlements in Ukraine decreased by 370 villages, an average of 17–18 villages annually. Compared to 1990, the rural population decreased by 26.5 %, and the death rate in rural areas exceeded the birth rate by 2.5 times. The rural employment rate in 2021 reached its lowest level of 46.7 % since 2000, which is 16.8 percentage points lower than its maximum value of 63.5 % in 2013. The purchasing power of rural residents is declining, food consumption is decreasing, the cost of living is constantly rising, and their standard of living is deteriorating. The situation with providing villages with social infrastructure facilities is complicated. As a result of the administrative and territorial reform in rural areas, it not only did not improve, but on the contrary worsened, the peasants' access to medical and educational services became difficult, in some cases impossible.
- 3. Based on the analysis of the state and level of socio-economic development of Ukraine's rural areas in modern conditions, the main problems have been identified and systematized, the solution of which will ensure rural development on the basis of sustainability. The basic problems affecting rural development are systematized by groups: socio-demographic, economic, environmental and nature protection, institutional, political. Understanding the existing problems creates an opportunity to form effective state policy measures for rural development, requires rethinking the power decentralization reform and implementing effective instruments of the organizational and economic mechanism for ensuring sustainable rural development in territorial communities of direct and indirect influence.
- 4. In order to assess the impact of factors on the efficiency of functioning and financial capacity of territorial communities, a multifactorial correlation and regression analysis was conducted. According to its results, it was found that the general profitability of territorial communities is affected by: the profitability of community lands; local taxes and fees; fiscal return of the territory; expenses of the general fund; expenses for the maintenance of management personnel; capital expenditures and the amount of subsidies (official transfers, basic subsidy). Of the factors considered, the level of capital expenditures is most affected by the fiscal return of the community territory per 1 inhabitant. The relationship between the investigated parameters of the equation and the resulting characteristic and its quantitative assessment expands the scope of correlation and regression analysis in developing and specifying directions for increasing the financial capacity of rural territorial communities.

Promising areas of further research in this context are the development of an effective state policy for rural development in Ukraine and the justification of methods and mechanisms for its implementation in the post-war period.

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