## SOCIO-ECONOMIC PARAMETERS OF FUNCTIONS OF THE TERRITORY OF TERRITORIAL COMMUNITIES IN THE CONTEXT OF SPATIAL PLANNING

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#### Abstract.

The existing methods and parameters for determining the capability and monitoring the development of territorial communities in ecological, economic and social sections are analysed. It was established that most of the methods and parameters are fundamental and involve a general assessment of community capability and are not aimed at being indicators of the development of a separate territorial community in ecological, economic and social terms.

It is proposed to use the parameters of the territory's functions as indicators of the development of territorial communities. The choice of the parameters of the territory's functions is based on the need, based on the aspects of spatial planning and spatial development, to plan the territory of the community in such a way that it performs its functions as efficiently as possible within its powers and capabilities. Based on the analysis of scientific works, the definition of the concept of "territory functions" is given and a list of their functions relevant within the framework of this study is formed. The list of parameters of the territory's functions is proposed and substantiated, it is indicated that the communities are able to partially provide them, and it is determined that they could serve as indicators of the development of territorial communities indirectly through the planning documentation of the territory of the community, and the method of their determination is proposed. The socioeconomic parameters of the territory functions for the Chinadiiivska settlement territorial community of the Mukachivskyi raion of the Transcarpathian oblast have been determined.

**Key words:** functions of the territory, parameters of the functions of the territory, indicators of the development of territorial communities, spatial planning of the territories of communities, spatial development.

Problem statement. As of June 2022, two years have passed since the completion of the formation of territorial communities in Ukraine, which took place as part of the processes of decentralization of power and administrative-territorial reform at the local level. In accordance with the orders of the Cabinet of Ministers of Ukraine "On the determination of administrative centres and approval of the territories of territorial communities", which were developed for each Oblast, more than 1470 territorial communities were formed [1]. At the same time, decentralization consists in expanding the capabilities of territorial communities and their obligations. On the one hand, the proportions of the distribution of budget revenues between local and state budgets under various articles changed, and on the other hand, communities had to maintain social infrastructure at their own expense [2]. Accordingly, the question arose of how to properly use available financial and other resources for the most effective development of the community. After receiving more funds, they must be used to create the prerequisites for obtaining long-term benefits, for which it is necessary to act in accordance with the development strategy. At the same time, the formation of parameters for assessing the ecological, economic and social state of communities and monitoring their development becomes an extremely important aspect.

The lack of an exhaustive list of community assessment parameters that would be objective and determined on the basis of open data, statistical reporting data and data accumulated by communities makes the process of unified assessment of the community current state and monitoring of its development ineffective and difficult, because in fact every researcher or analyst forms his/her own set of parameters and determines evaluation criteria for them and actually carries out this process according to his/her own methodology. Resolution No. 214 of the Cabinet of Ministers of Ukraine dated April 8, 2015 "On the approval of the Methodology for the formation of capable territorial communities." approved the criteria for preliminary assessment of capable territorial communities. It is about the population, the number of students in general secondary education institutions, the area of the territory, the fiscal capability index of the budget, and the share of local taxes and fees in the revenues of the local budget [3].

However, even if these criteria could be applied for the purpose of forming united territorial communities, they cannot be applied for a comprehensive assessment of their ecological, economic and social condition and monitoring of their development. Accordingly, there is a need to create a list of parameters that could be indicators of the current state and development of territorial communities. Within the framework of this study, we will focus on the socio-economic parameters of the functions of the territory, which could be such indicators. The choice is focused on the functions of the territory, because based on the aspects of spatial planning and spatial development, we need to plan the territory of the community in such a way that it performs its functions as efficiently as possible. We define these parameters for the Chinadiiivska settlement territorial community of the Mukachivskyi raion of the Transcarpathian oblast.

Analysis of the latest scientific research and publications. L.Ya. Novakovskyi, Y.M. Dorosh, M.A. Khvesyk, A.M. Tretiak, O.S. Dorosh, Sh.I. Ibatullin, O.I. Shkuratov, O.M. Loschykhin, O.Yu. Bobrovska, D.A. Bystrova, O.V. Batanov, M.V. Iliina, P.O. Ostapenko, I.M. Hrynchyshyn devoted their work to the study of decentralization processes, assessment of the state and development of communities, the formation of community development parameters and indicators, and the functional purpose of the territory.

Bobrovska O.Yu. examines the meaning of the concept of "development" and its components in the projection of processes taking place in territorial communities and determines the characteristics and parameters of development processes. In the process of development of territorial communities, it attaches great importance to stability, balance and complexity and indicates indicators of these characteristics. Evaluates the development of system components of communities and their overall development [4]. The proposed development criteria are fundamental criteria for evaluating development strategies, programs and plans rather than the actual economic, ecological and social condition of communities and their development.

Khvesyk M.A. and Iliina M.V. summarized the main opportunities and obstacles on the way to the development of united territorial communities in Ukraine under the conditions of administrative reform. They developed a system of parameters for assessing community development prospects, substantiated their application for territories of various types, and presented a system of economic, social, and ecological parameters for evaluating prospects for the development of rural community territories, classified by spatial characteristics [5]. A wide set of parameters is proposed, which provide a fundamental general assessment of territorial communities in terms of types of territories.

Hrynchyshyn I.M. interprets the capability of the territorial community as the presence of financial, infrastructural, personnel conditions and the ability to provide the appropriate level of public services in the process of functioning and development of the community in general, as well as the opportunity to assess the potential and use it to strengthen the capability. The parameters of the capability of the territorial community according to subject affiliation, elements of functional capability and criterion signs of achieving capability have been determined [6]. With the help of the proposed criteria, the capability of the community in a broad sense is determined, and not its development according to ecological, economic and social parameters.

Ostapenko P.O. proposes to expand the methodology for the formation of capable territorial communities approved by the Cabinet of Ministers of Ukraine with additional calculation indicators and to introduce indicators of infrastructure development into the methodology [7]. These are indicators of the capability of territorial communities, but the ecological aspect is not considered.

Aim of the study is to propose socio-economic parameters of territory functions that could serve as indicators of economic and social development of territorial communities in the context of spatial planning of the territory of the community. Determine the proposed parameters of the territory's functions for the Chinadiiivska settlement territorial community.

**Materials and methods.** At the initial stage of conducting research, we were interested in the interpretation of the concept of "territory" in order to further define its functions. The academic explanatory dictionary gives three definitions of this concept at once, which defines the territory as: 1. a part of the globe that is part of some part of the world or belongs to a certain state; 2. a part of any country; 3. land area occupied by a settlement, institution, enterprise, etc. [8]. Hence, the territory is an object of specific activity.

This concept is also defined by the Law of Ukraine "On Regulation of Urban Planning Activities" in the following version: "a part of the earth's surface with air space and subsoil located under it within defined limits (borders), which has a certain geographical position, natural conditions and conditions created as a result of human activity and resources" [9]. Note that in the field of urban planning, the territory is defined as an object for which urban planning activities and planning are conducted.

The Law of Ukraine "On Land Management" does not define the term "territory", but Article 5 defines land management objects, which include: the territory of Ukraine; territories of administrative-territorial units or their parts; territories of land ownership and land use or separate land plots [10].

Based on the analysis of scientific works in the field of legal science, the concept of "territory functions" is given. Bystrova D.A. understands the concept of "functions of the territory" as "the main directions of using and realizing the potential

of the territory as a whole system, which are necessary for solving certain tasks and achieving the goals set by society for the state at the moment and in the future" [11]. Batanov O.V. instead, by the functions of the territory, understands "the main directions or types (forms) of the use and realization of the geopolitical, economic, spiritual-cultural, informational and other potentials of the territory as a complete system, necessary for solving certain tasks and achieving goals" [12]. Professor Loschykhin O.M. states that "some functions of the territory are determined by the general functions of the state" [11].

Land management specialists have not yet investigated this issue. Taking into account the changes that have taken place in the legislative field, in particular, the Law of Ukraine "On Land Management", the development of new types of land management documentation has been introduced, namely: "... land management projects regarding the establishment of territorial boundaries of territorial communities ..." (paragraph a<sup>-1</sup> of article 25) and "... urban planning documentation, which is at the same time land management documentation (complex plans for the spatial development of territories of territorial communities, master plans of settlements, detailed plans of territories" (paragraph  $\delta^{-1}$  of Article 25), which introduce the concept of the "**territory of a territorial community**" [10].

Based on the analysis, the following list of territory functions was formed:

• Determination of the spatial boundaries of dominion. It is a very important function, because it defines the territory of legal personality within certain limits.

• Spatial structuring of state power and local self-government and organization of their activities. This function ensures the spatial structuring of the power hierarchical system at different levels, which contributes to its effective functioning and implementation of its powers and tasks.

• **Ensuring the livelihood of the population.** Allows people to meet their daily needs and shape their living space.

• **Provision and protection of human and citizen rights and freedoms.** It is an extremely important function that forms an institutional environment capable of protecting the rights, honor and dignity of a person and a citizen.

• **Communicative.** Forms a space for personal, business and other communications between people.

• Security. Forms a security system that provides a sense of personal and public security and ensures it.

It is important to note that in this context we are talking about the functions of the territory in general and they are more applicable to the territory of the state and the tasks facing the state authorities. In our study, we are talking about the territories of territorial communities. Territories of territorial communities and communities as a local self-government body are able to partially perform these functions. In particular, spatial planning is a tool for performing these functions, which determines the planning organization of the territory and the space of the community and, accordingly, is able to contribute to the performance of these functions by the territory of the community. The community is able to influence the functions of the community territory and form them due to the close in essence, but not the same concept of functional zones of the territories, which, according to the Law of Ukraine "On Regulation of Urban Planning Activities" are defined as: "defined by the comprehensive spatial development plan of the territory of the territorial community, the master plan of the settlement or the territory zoning plan is a part of the territory of the territorial community, in respect of which a certain set of permitted (predominant (main) and secondary) types of intended use of land plots is defined and, in accordance with the legislation, restrictions on the use of land in the field of development are established" [9].

Accordingly, in the context of the territories of territorial communities, it is appropriate to talk not about the parameters of the general functions of the territory, but about the parameters of the functions of the territory that the community is able to provide and the tools with which the community carries out the organization and planning of the territory and establishes the functional zones of the territories. Namely, we are talking about land management documentation and urban planning documentation, and first of all, about a comprehensive plan for the spatial development of the territory of the territorial community, but not only about this planning tool.

The next step is the formation of parameters by which it would be possible to determine whether the territories of territorial communities perform the above functions within their competence due to the development of land management documentation, which is also urban planning documentation, and which could also be determined by open data, data of state statistical reporting and data accumulated by communities. We note that the selected parameters should be relevant in the context of spatial planning and relate to the functions of the territory not directly, but rather indirectly through the above-mentioned documentation. In accordance with this, we worked out socio-economic parameters in the development of land management documentation, which at the same time is urban planning documentation, proposed methods for their determination and substantiated the relevance of these parameters.

1. **Establishing community boundaries.** The established boundaries in the community determine its territory of legal personality for the performance of its own functions (primarily to determine the spatial boundaries of dominion).

2. **Concentration of agricultural land among land users.** It is determined according to the method proposed by I.P. Kupriyanchyk. and Dorosh A.Y. and is calculated by the formula:

$$K_{CI} = \frac{\sum_{i=1}^{I} \{S_i \mid S_i > CI\}}{S_{s}} \times 100\%, \tag{1}$$

where K – share of the concentration of agricultural land or selected land in individual land holdings, %;

CI – concentration indicator, the area relative to which the concentration fraction is calculated;

 $S_i$  – individual land holdings area, ha;

 $S_3$  – total area of agricultural land or selected agricultural land type on the territory of the united territorial community, ha [13, 14].

This parameter is important in the context of the distribution of labor and income from the main asset in rural communities, namely agricultural land.

3. **Involvement of residents in the process of production of agricultural products.** This parameter is interconnected with the previous parameter and indicates the distribution of labor and income from the main asset in rural communities and, accordingly, is an indicator of the well-being of community residents. It is determined on the basis of the indicator of land concentration and data of territorial communities regarding the lease of agricultural land in the community.

4. **Investments in the development of technical infrastructure.** It is an important parameter of community development. They are determined according to the data of the State Statistics Service of Ukraine and based on the analysis of community budget expenditures.

5. **Investments in the development of social infrastructure.** It is an important parameter of community development. They are determined according to the data of the State Statistics Service of Ukraine and based on the analysis of community budget expenditures.

6. **Spatial availability of goods and services.** Spatial analysis determines the availability of certain goods and services on the territory of the community, as well as the distances that must be covered to obtain these goods and services. In the context of a full-scale invasion of the Russian Federation, it becomes especially important.

7. **Internal and external logistics chains of the community.** It is an important indicator of a) both the production of goods and the provision of services on the territory of the community; b) sources of origin of goods and services originating from outside the community; c) "export" of goods and services available on the territory of the community. The reliability of logistics chains is important, especially in the context of a full-scale invasion by the Russian Federation.

8. **Demographic situation of the community.** One of the most important socio-economic parameters of the community, in relation to which it is necessary to build a strategy for its development.

9. Volumes of the community budget and its dependence on subventions/subsidies. It is determined by analyzing the income part of the community budget. It is important in the context of understanding the self-sufficiency of the community and its provision of its own income. It is intended to determine "the desired annual growth of the community budget with the aim of replacing a certain share of subventions and subsidies with own revenues" according to the following formula:

$$i = \sqrt[n]{\frac{B'}{B}} - 1, \tag{2}$$

where i – average annual growth of own budget revenues;

B' – the desired amount of own budget revenues at the end of the period;

B – the existing amount of own budget revenues;

n – number of years [13, 15].

This parameter will make it possible to estimate the necessary increase in the community's own budget revenues from year to year.

**Results and discussion.** According to the developed list of socio-economic parameters of the functions of the territory and the proposed method of their determination, the value of these parameters was determined for the Chinadiiivska settlement territorial community of the Mukachivskyi raion of the Transcarpathian oblast (Table 1).

# Table 1. The value of the parameters of the territory functions for theChinadiiivska settlement territorial community of the Mukachivskyi raion of theTranscarpathian oblast

Territory function parameter name	Parameter value and short comment
Establishing community boundaries	The project of establishing community boundaries was not developed
Concentration of agricultural land among land users	For a concentration indicator of 100 hectares
	-20%
	For a concentration indicator of 200 hectares
	- 8%

	Insignificant concentration of lands
Involvement of residents in the	
process of production of	Average
agricultural products	
Investments in the development of	Insignificant, only 4.5% of the total budget
technical infrastructure	expenditures, almost 5 million hryvnias
Investments in the development of	Significant, about <sup>3</sup> / <sub>4</sub> of the budget is spent on
social infrastructure	education and health care
Internal and external logistics chains of the community	On the territory of the community, mainly
	agricultural products are produced, and basic
	administrative services are provided
Demographic situation of the community	The number of the population is decreasing,
	the rate of decrease is lower than the average
	for Ukraine, but there is an increase in the
	number of the population during March-June
	due to the arrival of internally displaced
	persons
Volumes of the community budget	Budget expenditures amounted to UAH 109
and its dependence on	million. in 2021. Subventions and subsidies
subventions/subsidies	make up 61.46%. High level of dependence

Analyzing Table 1, we note that the concentration of agricultural land among land users on the territory of the Chinadiiivska settlement territorial community is insignificant, because only 8% of the community's agricultural land is cultivated by one land user, whose land use exceeds 200 hectares and amounts to 390 hectares. At the same time, only 20% of the agricultural land of the community is cultivated by land users who cultivate more than 100 hectares. At the same time, it is possible that the concentration of agricultural land is somewhat higher, because as of 2016, there were several hundred hectares of land plots of unclaimed heritage on the territory of the community, which are quite likely being cultivated. Accordingly, we are talking about the average level of involvement of community residents in the process of agricultural production.

Investments in the development of technical infrastructure are insignificant, but investments in the development of social infrastructure are higher. Regarding the internal and external logistics chains of the community, mainly agricultural products are produced and basic administrative services are provided on the territory of the community, other goods are imported into the community from outside its borders, and a wider range of goods and services is available in the nearby City of Mukacheve.

Regarding the volume of the community budget and its dependence on subventions/subsidies, budget expenditures amounted to UAH 109 million in 2021, and subventions and subsidies accounted for 61.46%, which indicates a high level of dependence of the community budget on subventions and subsidies. At the same time, the community needs a 9.6% annual increase in its own revenues for 5 years in order to replace 60% of subventions and subsidies with its own revenues.

**Conclusions and perspectives.** The parameters of the territory's functions are important indicators of the current state of community development in ecological, economic and social aspects. The functions of the territory are extremely important for the functioning of the community, as a society and as a local self-government body, and the community must, through the exercise of its powers and planning of its development, including in the context of spatial planning of the community territory, ensure the implementation of these functions within the limits of its own powers and capabilities. The socio-economic parameters proposed by us reflect the effectiveness of the implementation of these functions on the territory of the community indirectly through the planning documentation and allow planning the development of the community on their basis. Using the example of the Chinadiiivska settlement territorial community, it is shown how these socio-economic parameters are determined using the proposed methods.

In the future, it is expedient to work out the ecological parameters of the functions of the territory and define them on the example of the Chinadiiivska settlement territorial community, the formation of criteria that would indicate the need to improve certain socio-economic and ecological parameters, as well as the practical application of these parameters and their criteria in planning the development of territorial communities.

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## СОЦІАЛЬНО-ЕКОНОМІЧНІ ПАРАМЕТРИ ФУНКЦІЙ ТЕРИТОРІЇ ТЕРИТОРІАЛЬНИХ ГРОМАД У КОНТЕКСТІ ПРОСТОРОВОГО ПЛАНУВАННЯ

#### Анотація.

Проаналізовано існуючі методики параметри ma визначення спроможності моніторингу розвитку територіальних та громад в екологічному, економічному та соціальному розрізах. Встановлено, шо більшість методик та параметрів є фундаментальними та передбачають загальну оцінку спроможності громад та не орієнтовані на те, щоб бути індикаторами розвитку окремої територіальної громади в екологічному, економічному та соціальному розрізах.

Запропоновано використовувати параметри функцій території як індикатори розвитку територіальних громад. Вибір параметрів функцій території обґрунтовано необхідністю виходячи з аспектів просторового планування та просторового розвитку планувати територію громади таким чином, щоб вона максимально ефективно виконувала свої функції в межах своїх повноважень та можливостей. На основі аналізу наукових праць наведено визначення поняття «функції території» та сформовано перелік релевантних у рамках даного дослідження перелік їх функцій.

Запропоновано та обґрунтовано перелік параметрів функцій території, зазначено, що громади здатні їх частково забезпечувати, та визначено, що

вони опосередковано через планувальну документацію території громади могли б слугувати індикаторами розвитку територіальних громад та запропоновано методику їх визначення. Визначено соціально-економічні параметри функцій території для Чинадіївської селищної територіальної громади Мукачівського району Закарпатської області.

**Ключові слова:** функції території, параметри функцій території, індикатори розвитку територіальних громад, просторове планування територій громад, просторовий розвиток