

## MULTI-FUNCTIONAL DEVELOPMENT OF RURAL AREAS

## БАГАТОФУНКЦІОНАЛЬНИЙ РОЗВИТОК СІЛЬСЬКИХ ТЕРИТОРІЙ

*Multi-functional development of rural areas oriented to simulate self-development in conditions of decentralization. The article demonstrates the results of using sociological survey method for assessment of the existing state of development. It also uses statistical method for analysis and model formation and expert assessments method – to develop mechanisms for overcoming existing asymmetries and disproportions. The analysis of the dynamics of the formation of rural territories has been done. The prospects for their development have been modeled, the prospects of growth have been conceptually outlined through the expansion of the settlement network. Private investments in the development of territories are economically, socially and environmentally justifiable and do not require additional budgetary expenses.*

**Key words:** rural multifunctional development, family homestead settlement, self-identification, inclusion, management.

*Встановлено, що багатофункціональний розвиток сільських територій орієнтований на саморозвиток в умовах децентралізації. Продемонстровано результати використання соціологічного опитування для оцінки наявного стану розвитку сільських територій. За допомогою статистичного та експертного підходів розроблено механізм подолання наявних асиметрій і диспропорцій. Проаналізовано динаміку формування сільських територій, змодельовані перспективи їх розвитку.*

*Концептуально окреслені перспективи зростання за рахунок розширення мережі поселень. Доведено, що приватні інвестиції у розвиток територій економічно, соціально та екологічно виправдані і не вимагають додаткових бюджетних витрат.*

**Ключові слова:** багатофункціональний розвиток сільських територій, родові поселення, самоідентифікація, інклюзія, управління.

*Установлено, що багатофункціональне развитие сельских территорий ориентировано на саморазвитие в условиях децентрализации. Продемонстрированы результаты социологического опроса для оценки существующего состояния развития сельских территорий. С помощью статистического и экспертного подходов разработан механизм преодоления существующих асимметрий и диспропорций. Проанализирована динамика формирования сельских территорий, смоделированы перспективы их развития. Концептуально обозначены перспективы роста за счет расширения сети поселений. Доказано, что частные инвестиции в развитие территорий экономически, социально и экологически оправданы и не требуют дополнительных бюджетных затрат.*

**Ключевые слова:** многофункциональное развитие сельских территорий, родовые поселения, самоидентификация, инклюзия, управления.

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**Problem statement.** Issues of development of socio-economic systems are the most urgent from the point of view of determining its essence and factors of provision. The relatively slow nature of the development of productive forces as a condition for the formation and change of economic systems until the twentieth century. (economic management was based on the stochastic use of tools and mechanisms of negative feedback of complex open nonlinear unbalanced systems, which can be considered as a socially right) is now under the influence of transformations that accelerated the rate of change of basic homeostasis on the basis of tools of mechanisms of positive feedback as a continuous process. The change of the object of influence from the state of the environment on the causes and mechanisms of the change is due to the integrity of the management process as a purposeful influence on the evolution of society as part of nature, which is determined by its general laws. Understanding these laws allows us to achieve the effect of a higher socio-economic effect due to synergy and balanced development.

**Analysis of recent research and publications.**

An evolutionary-civilizational approach to the management of the development of socio-ecological and economic systems, outlined the priority of the socio-natural essence of instruments and develop-

mental mechanisms based on the ideological noosphere approach to understanding the unity of all systems in the universe, in contrast to the anthropocentric philosophy of social existence that prevailed until this time. The cyclical nature of globalization crises is determined by the lack of understanding of the mechanisms of systemic integrity and interdependence of phenomena, as well as processes, their adaptation, integration and bifurcation mechanisms of interaction. Harmonization of the relations of society and nature forms the basis for the emergence of a new paradigm of development through cooperation and partnership within the framework of self-organized complex systems, which are society and the environment. Strengthening the role of nature-friendly technologies in life and management, in contrast to the consumer's approach, prevailing until the twentieth century, is intended to form the idea of the natural integrity of being. Among the domestic authors, the works of O.G. Bulavka [1], M.M. Kropivko [2], O.I. Pavlov [3], V.V. Yurchishin [4] and others. Against the backdrop of the demographic crisis, approaches to the development of rural society have become widespread (such as M.H. Vdovichenko, K.I. Yakuba, M.K. Orlatyi, P.T. Sabluk [5–6], Yu.F. Melnyk, B.K. Supikhanov, Yu.Ya. Luzan [7], O.S. Kilynitska [8], O.L. Popova, I.V. Prokopa, T.V. Berkuta [9–10]). Foreign research-

ers point to the need for sustainable and balanced development of rural areas (O.S. Orlov [11], J. Hovit, and C. V. Mason [12]).

**The research purpose** is to describe the model of multi-functional development of rural areas in conditions of decentralization.

**Research results.** The limited use of all kinds of resources by traditional technologies forms the preconditions for the dissemination of innovative socio-environmental approaches to their involvement. Given the exceptional role of land resources from the point of view of the spatial distribution of the population and objects of the public sector, ensuring food and economic security of the state, land is the primary factor of production and life. The need to review approaches to the socio-economic use of the environment, preserving the balance of systems, including through the tools of sustainable development, is the basis for the safe man's residence. An illustration of this is the distribution of the land fund in the country (Table 1), where more than 15 million hectares of land require reclamation and flooding (the actual level of flooding in 16% is lower than the normative – 22.1% and the average European country – 25–30%, – the area under the forests in comparison with 60 years of the XX century decreased by 10 times), which makes it impossible to achieve ecological balance [14].

The lack of readiness of the domestic economic, political, social and technological and technological systems to effectively solve the problems of the development of society in the conditions of globalization and decentralization, and as a consequence, the strengthening of migration processes, including outside the country, is a manifestation of systemic and territorial problems, the solution of which lies in the level of participatory development and inclusiveness of all members of the community. The way out of the existing situation is the practice of multifunctional development. The scientific hypothesis of the study is as follows: multi-functional development of rural areas (MDRA) contributes to the growth of the socio-ecological and economic potential of territories, ensuring their revival, human capital increase, improvement of demographic situation, level of devel-

opment and health of the population, strengthening of the stability and self-sufficiency of the territory. The object of the research is the BRST process in the conditions of the globalization of social processes and the decentralization of power through the mechanism of "Family Farmstead" (Pic. 1). The MDRA governance principles are: openness, transparency and transparency (from the point of view of determining and applying criteria for choosing measures, procedures and processes), system-wide benefits, localization, realism, personification, partnership and cooperation, subsidiarity, accountability, comprehensiveness and predictability, flexibility, equality, responsibility for the realization of goals, participatory coherence, multifunctionality and multi-vector development.

Priority methods of MDRA research and management are systematic analysis (with the aim of studying and designing socio-ecological and economic systems in rural areas), project and program-targeted approaches (with the aim of forming a coherent multifunctional rural development program). At the same time, the project management of MDRA as a system of purposeful activity on creation, use and increase of resources of the territory has signs of cyclicity, stage (phase, stage), vector orientation (for example, from the point of industry implementation, evaluation of efficiency, development of the system or its element, etc.) [15; 17]. MDRA provides for the active interaction and interaction of man and the environment, during which a person and / or the human community acts as a subject that purposefully influences nature in the process of meeting their own needs, multiplying the natural resource potential of the territory. Being the bearer of the function of cognition and subject-practical activity, directed on nature, personality and society as a whole, as a gestalt-oriented system of objective connections is based on the mechanism of management [6, p. 94], which includes a system of conditions, forms, methods and means of achieving goals.

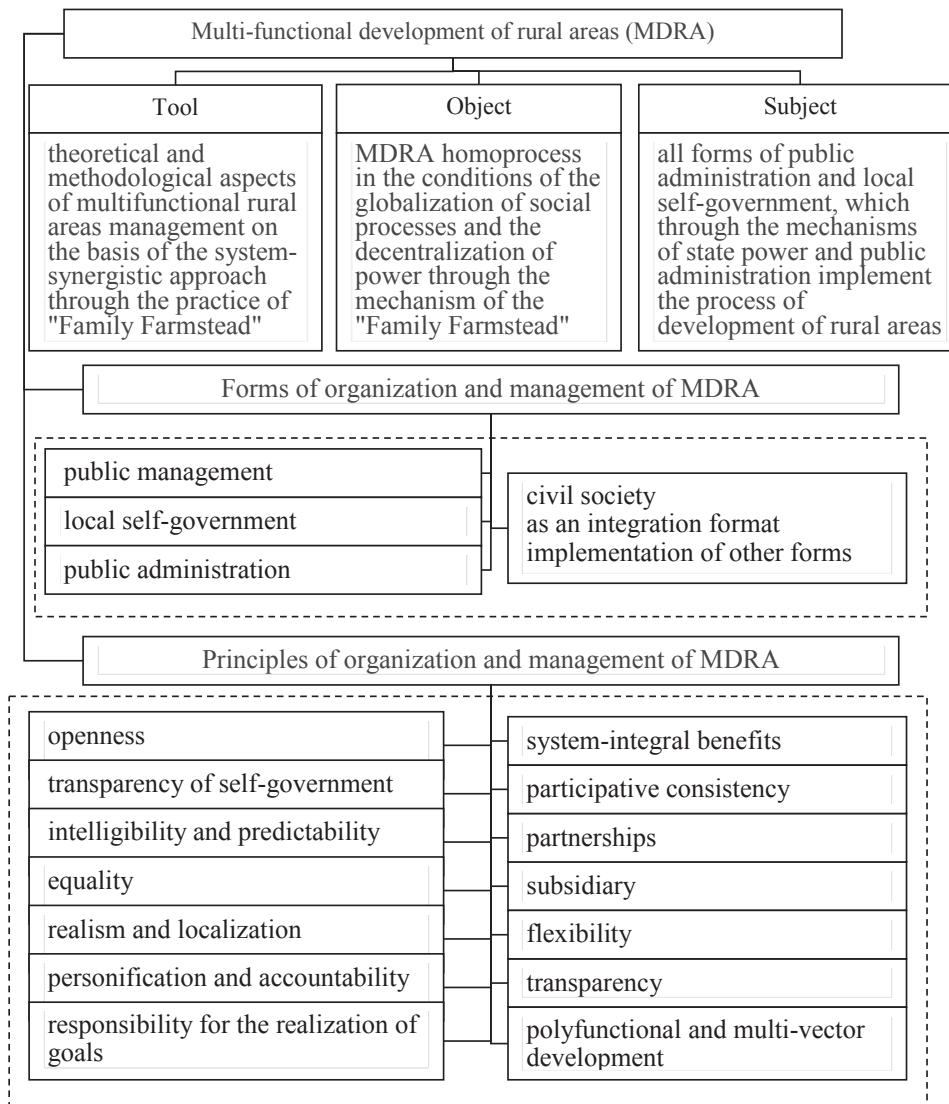
The regularities and properties of MDRA management activities include the following: (Pic. 2): 1) the conditionality of the development of the vector (motivation – the main driving force of development) not only from the position of satisfaction of needs

Table 1

**Dynamics of change of the land area of Ukraine, million hectares**

Types of land	1991		2000		2005		2010		2015		2015 vs 1994, %
	Mln ha	%	Mln ha	%	Mln ha	%	Mln ha	%	Mln ha	%	
Agricultural lands	41,7	69,6	43,1	71,3	42,8	70,9	42,8	70,9	42,7	62,5	101,7
Forests and forest covered areas	10,2	17,0	10,4	17,2	10,6	17,4	10,6	17,6	10,6	17,6	103,9
Built	3,48	5,7	2,46	4,1	2,51	4,1	2,55	4,2	2,56	4,2	72,0
Open or wetlands	0,82	1,5	0,95	1,6	0,98	1,6	0,98	1,6	0,98	1,7	119,0
Other lands	1,07	1,77	1,06	1,76	1,06	1,76	1,05	1,74	1,03	1,71	96,3
Water	2,41	4,0	2,42	4,0	2,42	4,0	2,43	4,0	2,44	4,0	101,2
Total	60,4	100	60,4	100	60,4	100	60,4	100	60,4	100	100,0

Source: formed on the basis of data from State Statistic and Land Committees [13–14]



**Fig. 1. Conceptual model for the study and management of MDRA**

Source: formed by the author

(material production, medical, cultural, educational and other activities), but simultaneously integrated requests as an individual, and in the interests of society as a whole – material Production at a level that ensures constant spiritual growth (the principle of reasonable sufficiency);

2) relative autonomy of MDRA – specific tasks can be achieved at the appropriate level of development of factors of objective reality;

3) the consistency and inheritance of the MDRA approaches, methods and means – each subsequent step of development arises on the basis of the previous with significant preservation of the value that has been accumulated before;

4) Alternating stages of relatively calm evolutionary development and rapid revolutionary changes in the existing structure;

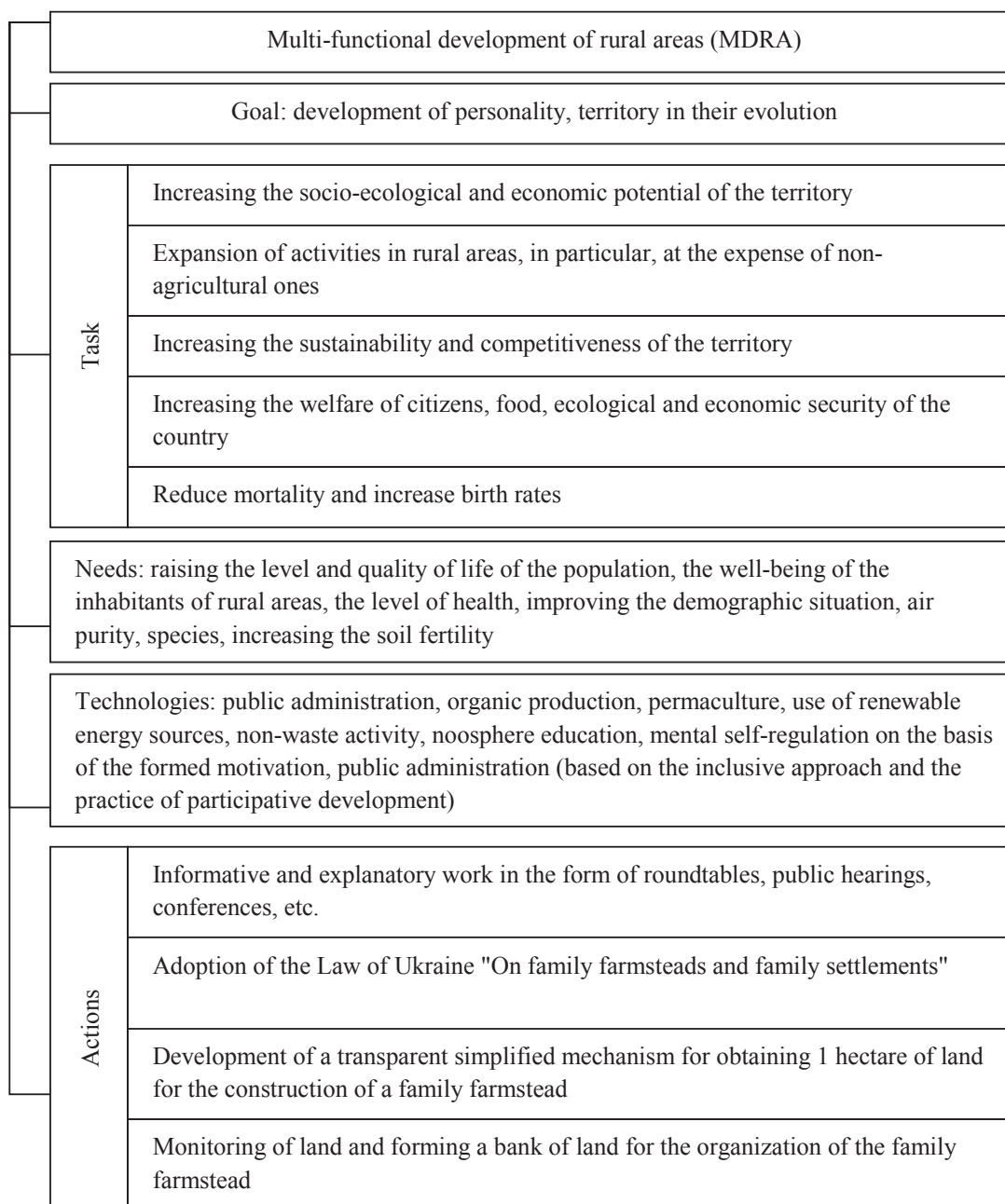
5) the interaction and interconnection of all spheres of life and human management in rural areas, which

should be taken into account in the management process of MDRA (this allows more qualitative influence on individual phenomena and obtaining higher results);

6) the cumulative nature of MDRA is due to the process of integration with the conditions (subjects and objects in the territory), complementing them;

7) differentiation and integration of the MDRA components.

The existing experience of management activities in the development of rural areas proves the necessity of expanding MDRA facilities and methods, methods, and technologies. New emerging branches and approaches contribute to the extrapolation of the changes enabling all areas of the country to emerge. At the same time, they have an integrated socio-ecological character (branches with prefix eco-, bio-, organics, socio-demo, etc.), as well as carriers of processes of imitation of natural laws that are mani-



**Fig. 2. Conceptual approach to interpretation MDRA**

Source: summarized by the author

festated in the environment. Their increased inter-sectoral and interpersonal nature influences multi-vector solutions, combining individual elements of the social system with friendly partner forms (for example, the practice of public-private partnership). Increasingly, the number of managerial actions is focused on the integrated impact of the aggregate endogenous and exogenous factors of MDRA in a single, environmentally-friendly goal-setting.

The practical implementation of this approach is realized through the mechanism of the "Family Farmstead", which says "to provide the legislative right to every citizen of Ukraine at the desire to provide

1 hectare of land for the construction of a family farmstead, free of charge for lifetime use, without the right to sell, with the right to transfer only by inheritance" (draft of The Law of Ukraine "On Family Farmstead and Family Homestead Settlement"). The practice of public management of the development of territories has expanded in 100 tribal settlements in Ukraine, as well as the improvement of the demographic situation and the level of self-employment (surveys of their inhabitants have established that the average age of settlers is  $35 \pm 5$  years, these people are 80% with higher education, generated ideas and ready investments, including financial, material, labor, intellec-



tual, in the family on average 3 children are born). The socio-economic environment of rural areas as a dynamic, open, stationary system developing in time as a one-dimensional space [16] can be described by the following equation (1):

$$K \frac{d^2 p}{dx^2} - I_x \frac{d^2 p}{dx} + f(x, p, t) = \frac{dp}{dt} \quad (1)$$

where  $K = K_x$  – the coefficient of energy exchange (including material resources, finances, information, social capital, etc.) in the environment;  $p(x, t)$  – number of elements of the system of rural territory;  $I = I_x$  – the rate of transfer of energy (including material resources, finance, information, social capital, etc.) in the environment;  $f(x, p, t)$  – a function that describes the intensity of the transformation of certain types of energy into others;  $x$  – spatial coordinate;  $t$  – time coordinate.

A partial case is a closed-loop system when no exchange with the external environment is foreseen. Such system characterized by the following equation (2):

$$K \frac{d^2 p}{dx^2} - I_x \frac{d^2 p}{dx} = 0 \quad (2)$$

According to experts from the Ministry of Agrarian Policy and Food of Ukraine, the National Academy of Agrarian Sciences in the person of NSC "Institute of Agrarian Economics" has shown that the size of investments of private investors in the territory, which nobody will demand to return, over 10 years will be more than 300 thousand UAH. in terms of 1 hectare of area [8; 15]. The formation of a conscious, experienced, harmoniously developed personality through the mechanism of "Family Farmstead", which has formed an honor and dignity along with benevolence and hospitality, reveals the possibilities of self-realization, including from the standpoint of self-employment, entrepreneurial activity, private initiative, and the integration into the management of the territory (in particular, through the mechanism of public administration), self-determination, increase of social responsibility for own life and surrounding space allows in the long run to stop young people going outside the country to restore and preserve cultural heritage. From economical point of view green rural tourism introduces living and feeding conditions, taking into account all ethno-cultural groups living in Ukraine, the peculiarities of everyday life and agricultural activity, traditions and customs of the region. Possibility of self-service within campsites and tent campuses forms the skills of an active lifestyle, may have features of fauna and flora, culturological and ethnographic. Natural environment, local culture, traditional architecture, participation in local cultural events, reveal wide possibilities of using natural, material and cultural potential of both personality and region, form an understanding of the culture of organized development and rest, strengthening of the family through demonstration of best practices of

family relations, There is a formation of a platform-environment for the implementation of the individual, its development and development of the local community.

**Conclusions.** Private investments in the development of territories are economically, socially and environmentally justifiable, do not require additional budgetary expenses. Implementation of the idea of "Family Farmsteads" allows for an inclusive approach and participatory management of the development of rural areas through the activities of civic organizations. The development of family settlements allows to provide over 30 thousand UAH. investments per hectare (ancestral estate) annually, as well as preserving Ukrainian traditions, contributes to the cultural development of the nation.

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