MULTIFUNCTIONAL DEVELOPMENT OF TERRITORIES: INNOVATIVE APPROACHES TO MANAGEMENT

Maria Plotnikova

Assoc. prof., Ph.D., Zhytomyr National Agroecological University. Stary Bulv. 7, Zhytomyr, 10008, Ukraine. Tel. + 380 67 440 03 49. E-mail marianma@yandex.ru

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The main goal of the system existence is the constant development. The ambiguity of interpretations of this concept, including in the context of the territorial entity, the lack of a systematic approach to sustainable development activates the search for the mechanism of its provision. There is a question, what is the way in management of the territory and what should be taken? The aim of the study is development category disclosure, search and justification of methods for implementation of programs for system innovation development of territories. The theoretical and methodological base of the study is system analysis and Systems theory. It is found that the development is a non-stop motion, evolution of space and structures therein. Human as the live self-sustaining system is a structure changing surroundings, its successful functioning is possible only in harmony with nature. Practical implementation of system cooperation of human and nature is successfully implemented in a network of ecological and ancestral settlements, which represent self-sufficiency and focus of development.

Keywords: forms of development, principles of development, characteristics of development, system management, the development of the territories. JEL Codes: D83, O10, O01, O18, R28.

1. Introduction

The current state of Ukraine is characterized by significant structural, functional, system and related to them social, environmental and economic problems and significant potential for the development of entrepreneurial and other activities. Population implementation of capacity-building requires the active support of the local authorities and population residing in the territory, as well as the formation of the local economy of the region. Particular cases of transformation are widely reflected in modern researches. O. Skidan (2010) studies aspects of state activity in the scope of national food security.

The increase of population migration (to cites and outside the country), reduction of the share of the working population, increasing pressure on the existing infrastructure is typical for many countries in the world (Paraguassú, 2014).

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An alternative is a local economy, which reduces the level of socio-economic problems and contributes to meeting the needs of (Christian, 2003; Gilman, 2013; Vidickiene, 2013; Palojarvi, 2013). Environmental friendliness and versatility areas require stimulation of personal and spiritual growth as a foundation for sustainable development (Borodina, 2010; Plotnikova, 2015; Yatsenko, 2013). A relevant search of the universal laws of system's development with the aim of management at the micro, meso- and macrolevels.

The aim of the study is to justify the mechanism of self-sufficiency achievement of rural territory, while analyzing the essence of the concept "development". The object of the research is modern approaches to the management of socioeconomic and environmental potential. The subject of research is the theoretical and methodological position and essential social, ecological and economic development of territories.

The study covers 1990–2015. Evaluation of socio-economic activities of economic entities and the population is carried out on the basis of systematizing the official data of the State Statistics Committee of Ukraine, the Global Ecovillage Network, materials of own observations. The study basis is a systematic analysis, reflecting the application of a systems approach to the study and modeling of economic entities, as well as summarizing existing experience and the formulation of conclusions. Sociological analysis conducted with the means of interviews and a questionnaire survey of 250 households and 100 residents of 25 ancestral settlements in Ukraine.

The research results are used in the educational process of Zhytomyr National Agroecological University, and by district and regional public authorities in order to optimize regional management at the macro, meso and micro levels.

2. Theoretical and practical aspects of the development of territories

The main purpose of the existence of any form of life is improving, progress, and development in those states, which are provided as movement mechanisms. Development as an immanent process of movement of matter, energy, mind, and ideal objects inherently involves the source of movement, the object itself, and is the internal qualitative and quantitative change in the essence of the object due to the transformation of the set of functional connections of elements, components under the influence of internal and external environment (conversion of an object due to the tendency contradictions) (Table. 1). According to the concept of socioeconomic development – an irreversible purposeful natural process of qualitative change in the object in time – the transition from strictly to the new, from simple to complex, from lower to higher (Becker, 1957; Berkes, 2008; Murphy, 1990; Swords, 2013). The focus and the possibility of development are determined by time. Entities making a lower stage of development, at the same time, are the starting point for the development of other systems and are in close relationship with the surrounding space. Systems (people, space, etc.) developed according to the laws of God, and the universe (what does not obey die or is transformed). Decisive principles of development are: 1) multi-level objective reality of the unity of the energies of time and space of different polarity, intensity, and frequency of vibration of the whole; 2) the multiplicity, complementarity, universality implementation of functions and tasks, confirming its appropriateness according to the conditions of the universe; 3) the presence of pulse energy – energy cluster development vector (Table. 1).

Classification sign	Kinds (forms) of development	
1) scale of implementation	global, supranational, national, regional, local	
2) space size	world, international, national, regional	
3) kind of changes	organizational, technical and technological, social, economic	
4) nature of changes	directional, cyclic, spiral	
5) dynamics of changes	moderate (evolutionary), irregular (revolutionary)	
6) trend of changes	linear, functional, and non-system	
7) degree of certainty	predictable, unpredictable (random)	
8) quality of changes	extensive (quantitative), intensive (qualitative)	
9) the level of control	controlled, spontaneous (unguided)	
10) mechanism of implementa-	adaptive, reactive, anticipatory (preventive)	
tion strategies		
11) complexity of the changes	exploded, integral, systematic	
12) goals of change in the field	political and legal, scientific, technical, economic, environmen-	
direction	tal, informational, cultural, social	
13) format of changes	simple, expanded	
14) speed of implementation	high-speed, medium-speed, high-speed	
15) number of participants	individual, group, universal	
16) degree of potential in-	fully and effectively used, it is not fully and effectively utilized,	
volvement	not used	

Table 1. Classification of the main types (forms) of development

The basic characteristics determining the level of development is parametric (external dimensions), energy potential, and object changes power. The concentration in a certain volume of a large number of high energy with a great potential qualitative change in space, opening his new abilities and properties (Seklitova, 2012). The inseparability of human impacts and space determines the direction of their development (Christian, 2003; European, 2009; Gilman, 2013; Palojarvi, 2013; Vidickiene, 2013). Space, designed to accommodation and upbringing of various forms of life, is efficiently formed according to this goal, including technology processes, types, and design of forms of life. Improving space is going on due to 1) control of functions and submission forms, placed in its volume, 2) features its own buildings, and 3) the development of forms and processes that are in it.

Space in the course of evolution becomes multidimensional and acquires an ability to evolve within and outside the scope indefinitely. With regard to dynamic processes occurring in the territory, it should be noted that the signs of degradation are chromatic pleonexia - excessive focus on exceptional enrichment, control, and power that exclude the spiritual and moral value of the individual as part of the ideological structure of the individual (Aristotel, 1983). International practice of regional development mainly relies on the experience of industrial activity and trade relations, creating conditions asymmetries and imbalances both local and global. Particularly difficult is the situation in rural areas, where lower (compared to other sectors of the economy) wage levels, quality of life, social infrastructure and labor prestige.

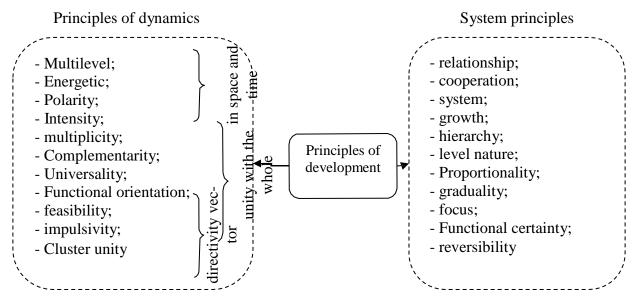


Fig. Principles of development

Therefore signs of degradation of the social order are: chromatic consciousness and activity; holistic approach to the realization of human features in the universe; violation of natural genetic laws of human society; information technology orientation in the development of society; fragmentation of thought and action; social determinism-development; exclusion from participation in public processes and the responsibility for them, that is observed in the regions of Ukraine.

Unlike chromatic and environmentally congruous approaches to production and livelihood have the personality-deterministic and planetary-cosmic orientation of solving problems of mankind. Systemic and direct involvement in providing strategic sustainable development are the pillars of the implementation of multidimensional and multi-functional nature of space. Formation of multifunctional regional development territory is characterized by 1) environmental imperative as the principle of objective necessity of the moral development of the person in contact with nature; 2) natural and genetic, harmonious, holistic, universal, forward-oriented thinking of people living in the territory; 3) healthy, able-bodied, creative, dynamic and environmentally-thinking people; 4) increasing the capacity of the territory due to the increased harmonization of interaction "Biosphere-Society" system; 5) increasing personal and social opportunities in their human transformation from the problems; 6) the ecologization of consciousness while person's fulfilling of biosphere function; 7) conscious choice in favor of the laws of the world and the cosmos. Thus, indicators of a holistic multi-regional development are environmental imperative; holistic social and environmental thinking; integrated, structured approach to decision-making and implementation; ideological activities on the basis of the genetic understanding of unity of the world; improving the spiritual and moral potential of human society; increase axiological (spiritual and moral integrity purposes) activities of the company; improving the nation's health and its ability to learn. Axiological and ideological activities of groups are typical for such an approach (high standards of behavior and self-actualization). The criteria for the effectiveness of the achieved level of territories' stability deemed approaches of Swedish doctor Karl H. Robert in the concept of

Natural Step – avoidance of 1) increasing concentrations of substances extracted from the Earth's crust (minerals, oil, gas, etc.); 2) the impact of man-made substances (polychlorinated biphenyls, insecticides, nuclear waste and other chemicals and compounds not found in nature); 3) reduce the natural ability of flora and fauna to heal (excessive fishing, erosion of surface soil, deforestation, significant change in terrain and other similar measures); 4) do not systematically meet the physiological needs of the human (living in poverty, etc.) (The Natural..., 2016).

Optimization of relations "man-nature" is implemented through the harmonization of the Company's interaction with natural systems through organic farming, permaculture design, nature congruous wasteless management and livelihood, meeting consumer needs, restoration of the natural resource potential, the introduction of renewable energy sources, adequate methods of education and training in power system improvement parts of the world as a whole. World experience of ecological settlements testifies to their close association with science and high technology in harmony with nature (Christian, 2003; GEN, 2016; Gilman 2013; Palojarvi, 2013; Plotnikova, 2015; Vidickiene, 2013). The main advantages of ecological and ancestral settlements are: 1) introduction of local currencies and the equivalent in barter transactions, stimulating local development; 2) collective right for invention (copyright hinders development of society; 3) collective decision-making and implementation (more effective as a result of use of discipline, commitment to the common interests, commitment of each in relation to the general matter. Practical experience is achieved in the network of ecological and ancestral settlements of Ukraine. Zhytomyr region has illustrated the model of public-private partnership based on the creation of the Coordinating Council, facilitating the issue of territories with the consistent interaction with public organizations, communities, governments, and local governments. Guidelines for public employees, chairmen of village councils and heads of administrations describe the mechanism of a simplified and transparent handouts of land for the organization of the family estate, as well as control over this process by the public authorities with the aim of co-operation between the family, settlement, village, district and regional councils and state administrations of corresponding levels. The results of the conducted research and the survey witnessed a higher rate of return on land and other resources in the settlements as a result of a new type of investment and innovative activity of the participants (Table. 2).

The survey witnessed a traditional Ukrainian way of life of the inhabitants of rural areas (involved in the production in home gardens – 98%, work in agricultural enterprises – 35%, or in any other industrial sector in a village or in the adjacent areas – 25% of all respondents were born in village and constantly lead the kind of lifestyle, the average age of the respondents 52 years old) and ecological outlook of residents of ancestral settlements (97% of residents of regional centers and the capital, consciously moved to the countryside: 35% live there permanently; 37% – work in shifts, 65% of them are male; 28% – live in the city, arriving at a settlement in the spring and summer, – 78% of their number or intermittently; the average age of 35 years the settlers). Among those interviewed 65% were male and 35% – female.

Comparative feature	A type of inhabitant in rural areas		
	households	Generic settlements	
1. Average age	52 years	35 years	
2. Number of children per 100 adults	183	232	
3. The level of education	32% specialized secondary, 60% – secondary, 8% – higher	13% specialized secondary, 87% secondary	
4. The desire and the aspiration			
for physical and spiritual perfec-	Low	High	
tion			
5. Main activities	Agricultural production	Creative and educational activi- ties	
6. The predominant technology in economic activities and livelihood	Traditional	Innovative, organic, non-waste, bioadequate and resource saving	
7. A will to develop and transform the territory	Low	High	
8. Indicators of regional develop- ment of basic settlement per 1 hectare	Pisky, Zhytomyr district, Zhytomyr region	Omelyanivka, Zhytomyr district, Zhytomyr oblast	
a) the actual rate of level regional development	2.1	1.7	
b) Index of regional development	5.7	1.8	
c) Energy performance of land re- sources	6.2	1.2	
g) Level of socio-economic im- pact, thousands of UAH	300	180	

Table 2. Socio-economic effects implementation of "Ancestral Home" concept

Model Approach in managing on practice is also implemented in the educational process of Zhytomyr National Agroecological University by posing and solving problems of students (development of crop rotation, the production of seed of varieties on the basis of established, the planning and evaluation of geodesic settlements, development and creation of renewable energy sources, socio-payment congruity of environmental innovations, and so on.). At the regional level a tool for implementing the concept of "Ancestral Home" Coordination Council is created, it reviews and approves the initiatives presented at the regional level by civil society organizations, research and educational institutions, residents of tribal communities (through coordinated introduction of the proposed terms of settlement) after the expert assessment by relevant authorities regional state administration.

3. Conclusions

Mechanism of rural territories' achieving of self-sufficiency is based on:

1. Their development as a non-stop movement, the evolution of space and structures in it, multi-vector nature of the development is realized through a variety of forms and methods of achieving it, as well as the ongoing process of transformation (conversion of energy and elements that make up the system).

2. Man as a living self-developing system is inextricably linked to self-

development of the environment, which is possible due to the optimization of natural farming, permaculture design, wasteless life, the introduction of renewable energy sources, bioadequate methods of education and training.

3. Practical realization of regional development is implemented to the practice of regional development, is implemented to the practice of administration on regional, district and rural level in Zhytomyr region and may be successfully widespread to other community of Ukraine and the world.

4. Suggestions and recommendations

Prospects for further studies connected with the development of mechanisms for interaction between the investor and the object of innovation and investment at the level of local communities.

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DAUGIAFUNKCINĖ TERITORIJŲ PLĖTRA: INOVATYVUS POŽIŪRIS Į VADYBĄ

Maria Plotnikova

Žytomiro nacionalinis agroekologinis universitetas

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Santrauka

Kiekvienos sistemos egzistavimo pagrindinis tikslas yra nuolatinis jos vystymasis. Sąvokos "vystymasis" interpretacijų dviprasmiškumas, kalbant ir apie teritorinį vienetą, ir sisteminio požiūrio į tvarų vystymąsi trūkumas skatina jo tobulesnio pateikimo paiešką. Kyla klausimai, kokie yra teritorijos valdymo būdai ir į ką reikėtų atsižvelgti. Šio tyrimo tikslas – atskleisti vystymosi kategoriją, ištirti ir pagrįsti programų, siekiant teritorijų sisteminės inovacijų plėtros, įgyvendinimo metodus. Teorinis ir metodologinis tyrimo pagrindas yra sisteminė analizė ir bendra Sistemų teorija. Tyrime nustatyta, kad vystymasis yra nuolatinis judėjimas, erdvės ir struktūrų evoliucija. Žmogus, kaip gyva savarankiška sistema, keičia aplinką ir gali sėkmingai veikti tik nekenkdamas gamtai. Praktinis bendradarbiavimas tarp žmogaus ir gamtos yra sėkmingai įgyvendinamas, vykdant susitarimus, pagrįstus tradicijų ir aplinkos išsaugojimu, kurie parodo savarankiškumą ir dėmesio sutelkimą į vystymąsi.

Raktiniai žodžiai: vystymosi formos, vystymosi principai, vystymosi požymiai, valdymo sistema, teritorijų vystymasis.

JEL kodai: D83, O10, Q01, Q18, R28.