

ANALYSIS OF THE WORLD EXPERIENCE OF AGRICULTURAL LAND USE FORMATION WHILE SPATIAL PLANNING OF TERRITORIES

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Abstract. The land management method is the main instrument for the organization of sustainable use and protection of land in the process of agricultural land use formation in spatial planning of territories. So, it is important to consider the effectiveness of the existing land management system as an ecological and economical tool for sustainable development of the agrarian sector. The discussion of the formation of the highly efficient agricultural land use in Ukraine is conducted while reviewing the world positive experience regarding the realization of the main principals of the spatial planning of territories. In this study, the international experience of land-use planning while sustainable use of agricultural lands is analyzed. A core of the main spheres of implementation of the world experience in spatial planning of the territories while applying ecological and economical mechanisms of sustainable use of lands in Ukraine is reviled. In this paper, the international experience of using the land management mechanism for providing sustainable use of agricultural lands that are based on spatial planning of rural areas as independent objects of management is studied.

Key words: sustainable development, spatial planning, decentralization, local community, region.

Urgency of the problem. A process of decentralization and territorial reorganization that is based on principals of sustainable land use is continuing in the current stage of development of Ukraine. Successful realization of this concept is aimed to change

fundamental principles of social development management and to be a prerequisite of solving different socio-political and socio-economic problems of the country development. Among first priority tasks that were listed are: to change the principals of the administrative-territorial system; to strengthen the local self-government; to guaranty giving to the local self-government enough authority and resources; to create the united local communities [1]. Decentralization provides opportunities to local communities and regions to have more levels of influence for their development and other social aspects. Problematic issues in the planning of regional development in the conditions of applying the reform are gaining their urgency. Efficient territory planning becomes a tool for increasing competitiveness between regions and is a useful method to manage territorial development and a way to unite actors with progressive goals and priorities. Strategic approach in planning supports the complex socio-economic development of territories, optimum use of limited resources within the region and is a tool to adjust a dialog between community and government.

Goal of the paper.To analyze the international experience of agricultural land use formation and to apply a concept of spatial planning of territories while local communities setting in Ukraine.

Analysis of recent researches and publications.Scientific publications of S.A. Bila, R.R. Bilyk, B.M. Danylyshyn, Y.M. Dorosh, O.S. Dorosh, A.M. Tretyak, and others conduct investigations of conceptual bases, issues, and prospects of regional development of the territorial planning. But, a question of the efficient planning of regional development, improving the theoretical and practical foundation of agricultural land use designing while special planning of local communities is still highly discussed.

Methodology of the research.Modern methods of research were used to reach the stated goals of the paper. First of all, theoretical summarizing of the scientific concepts, strategies, and plans regarding spatial planning within areas controlled by local communities was done based on the system-analytical method. The statistical analysis was applied to investigate the dynamics, structure, and efficiency of the current strategy

for the spatial development of communities and regions. The problem-oriented method was used to scientifically justify the strategic directions in which an inefficient policy regarding spatial planning of the territories is learned. The comparative method was applied to compare an efficiency of reforms of the spatial planning in different regions and countries.

Main material of the paper. Spatial planning of land use contributes to harmonious interconnection between planned territories that are under anthropogenic influence and native natural areas. It provides stable relationships even in the long-term perspective. This principle requires a complex approach for minimization of the negative consequences that already have a place as a result of existed planning of the land use. Available physical, social and economic resources that can be used for providing or applying spatial planning of territories require deep studying.

It can be mentioned that spatial planning should be a function of a governmental sector of management. A purpose of the spatial planning is to create a more efficient territorial organization of the land use and relations between them. It should include a mechanism of environmental protection and a way to build harmonic interrelations between social, economic and ecological goals. While planning, the influence of all production sectors of a country on existing land use should be evaluated and taken into account. It means that spatial planning is a key lever to stimulate sustainable development and improve the level of life. Spatial planning is realized only by methods of public management to harmonically connect ecological, economic and social branches of territories.

An analysis of the international experience regarding the formation of agricultural land use in the EU countries shows that sustainable land use of their territories conducts within the common policy that works in the EU. At the same time, this formation of land use in rural areas realizes when a new land-use should be made or when an existed one should be changed in borders, or while planning environmental protected actions, optimizations of land use, improving technics of production [1] or etc. Formation of

agricultural land use conducts based on a land management mechanism. Special attention requires activities that consolidate information about all land-uses that are under agricultural use and enshrine it in some common data arrays that are comfortable for commodity production of agricultural products. Such governmental policy is aimed to support farms the number of which decreases.

World experience shows that the economic stability of a country, its development and integrity can be reached only when regions of the country follow its economic policy. That is why, the significance of the region`s economy within the country`s economy, evaluation of interregional ties, defining a level of region`s development are highly actual in the last years. With the activation of decentralization processes, local communities play an important role to realize national policy in land management.

A local community is defined as a separate management system that has a strictly limited territorial boundaries, own control opportunities, financial and material foundation that stated by country`s legislation. The economic development of local communities is a purpose of a country's economic policy and a logical continuation of decentralization. The development of a local community conducts under some common tendency of a country`s development and as a result of its inner features of development. But an absence of the direct legislative settlements that control economic development of the regions and mechanisms for its complex regulation is a key problem.

International practice does not give an exact definition of “land-use” as a foundation of planning and management of the rational use and land protection. In some foreign countries, a land management mechanism of sustainable land-use provides land use planning of someadministrative-territorial entities. Redistribution of land plots between urban, rural and forestry farmsteads as well as the realization of environmental protection activities is provided by formed land-use plans [2]. Such planning is based on an idea that all territories can be zoned according to its land-use purpose. There is a zone for agriculture, construction, a zone of priority construction, a forest zone, a zone for individual and public purposes, and etc. These plans are normally publicly published

that gives a chance to know public options and, if they accept it, plans become recommendations or even mandatory for execution [2].

Sweden, Denmark, Japan	<ul style="list-style-type: none"> •improving the design of the territories of agricultural subjects
Germany, Czech Republic, Slovakia, Austria	<ul style="list-style-type: none"> •providing enviromental and ecological stability of the territories
Canada, USA, India, China	<ul style="list-style-type: none"> •planning of environmental, anti-erosional, melioration and other activities
EU countries	<ul style="list-style-type: none"> •providing economic support to agricultural entities by planning sustainable land use measures and providing technical and economic support for agricultural production, taking into account the quality of land parcels
EU countries, USA, Canada	<ul style="list-style-type: none"> •ensuring land circulation and functioning of the land market in accordance with the principles of sustainable land use
EU countries, USA, Canada and etc.	<ul style="list-style-type: none"> •integration and consolidation of agricultural enterprises while providing a differentiated mechanism for their support and functioning

Tab. 1 Land Management Planning in the World

Land planning in the territory of foreign countries is mainly investment in nature is carried out for profit. An investor in the field of land management can act as a state (first by buying, improving, and then selling land), as well as private investors and economic entities [3].

The state is able to regulate the land market, demand and supply of land through the land management mechanism of sustainable use of agricultural land. Analysis of the world experience of designing agricultural land use in the territory of the European Union confirms that sustainable land use is based on a Single European Union policy, and the design of systems of land management in rural areas is carried out when

necessary to create new land ownership or change the existing land, to improve the use of land, same optimization of a specific territory, improvement of production technologies, changes in its functional purpose me, etc. [4].

USA	Kanada	Australia
<ul style="list-style-type: none"> • Sustainable land use is based on the principles of continuous and efficient accounting of agricultural land; • organization of design of territories with landscape features (level of dismemberment, location of different types of lands, objects of infrastructure, etc.); • protection of valuable agricultural land from irrational withdrawal from circulation; <ul style="list-style-type: none"> • development of integrated plans for sustainable land use 	<ul style="list-style-type: none"> • ensuring effective control of soil erosion, promotion of environmental protection measures (conservation, terracing of slopes, protective forest cultivation, etc.); • the effectiveness of the Sustainable Land Use Mechanism is ensured by various planning developments (different scale maps, Plans of Survey or Descriptive Plans, digital maps) 	<ul style="list-style-type: none"> • obligatory implementation by landowners of internal land management on their land plots; • organization of aerial photography of agricultural land and development of plans for the organization of a certain territory; • development of agricultural land classifications taking into account qualitative soil indicators; • development of a system of soil protection measures taking into account the suitability of agricultural land for use

Tab. 2 World experience of sustainable land management

Considerable attention is also given to the issues of land consolidation and consolidation, subordinated to agricultural enterprises, their consolidation into a single land. Such public policy is aimed at supporting farms, the number of which tends to decline. More details on sustainable land management measures are given in Table 2.

Conclusion.For developed countries, the main tool of land policy implementation and land relations is the land management mechanism of sustainable use of agricultural lands. All land transformations regarding agricultural land usage are based on the basis of long-term planning and implementation of a comprehensive state policy. According to the conducted research that considered variety of ways to implement policies of

ensuring sustainable land use, which are described in land management projects, plans and schemes of the respective countries, a systematic approach to the spatial planning of territories is traced. Sustainable land use and land protection of foreign countries are based on improvements in the land use mechanism and development of geoinformation systems, which allow to obtain reliable and up-to-date data on the status of land plots, their agro-properties, established boundaries, etc. That is why in the most developed countries, land management is done in a complex way with the use of the land cadaster which is a source of information of the status of agricultural lands and the efficiency of their use.

Reference

1. Duhina T.A. (2015). Osoblyvosti rozvytku zemel'nykh vidnosyn za kordonom / T.A. Duhina // Kontsept [Features of the development of land relations abroad]. Naukovo-metodychnyy elektronnyy zhurnal, T. 13, 4481-4485.
2. Shvorak A.M.(2009). Zarubizhnyy dosvid planuvannya vykorystannya zemel'nykh [Foreign experience of land use planning]. Zemleustriy i kadastr, 3, 29–37.
3. Volkov S.H. (2005). Zemleustroystvo [Land Management]. Kolos, 408.
4. Volkov S.N. (2012). Opyt zemleustroystva na zemlyakh sel'skokhozyaystvennogo naznacheniya v SSHA i Kanade [Land management experience on agricultural land in the USA and Canada]. GUZ, 44.
5. Hreshchuk H.I. (2017). Svitovyy dosvid funktsionuvannya zemlevporyadnoho mekhanizmu staloho vykorystannya sil'skokhospodars'kykh zemel'nykh [World experience of functioning of land management mechanism of sustainable use of agricultural land]. LAND USING, 1,103.
6. Dorosh O., Dorosh I., Kupriyanchyk I., Butenko Y., Kharytonenko R. (2018). Assessment of land resources productive potential influence on agricultural products gross output in Ukraine. Scientific papers Series “Management, Economic Engineering in Agriculture and rural Development”, 18,3.

7. Danylyshyn B. M., Khvesyk, V.A. (2010) *Ekonomika pryrodokorystuvannya* [Economics of Nature Management]. Ukraine, Kondor, 465.
8. Dorosh Y.M., Tretyak A.M., Tretyak V.M., Dyumina K.O. (2018). *Prostorove planuvannya zemlekorystuvannya u systemi naukovykh doslidzhen* NAAN U [Spatial planning of land use in the system of scientific research NAAN]. 3,4-13.
9. Dorosh O. S., Fomenko V.A., Melnyk D.M. (2018). *Klyuchova rol zemleustroyu u planuvanni rozvytku systemy zemlekorysuvannya u mezhakh terytorialnykh hromad* [Key role of land management in planning the development of land use within the territorial communities]. 2, 22-32.
10. Bilyk R.R. (2014). *Stratehichni priorityty pidvyshchennya konkurentospromozhnosti rehioniv ta ekonomichnoyi bezpeky Ukrayiny* Ekonomichna bezpeka: derzhava, rehion, pidpryyemstvo. Materials of the Third All-Ukrainian Scientific and Practical Internet Conference with International Participation, 84-49.

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Аналіз світового досвіду формування сільськогосподарських землекористувань у просторовому плануванні територій

Метод землеустрою є основним інструментом організації сталого використання та охорони земель в процесі формування сільськогосподарських землекористувань при просторовому плануванні територій, тому важливо розглянути ефективність існуючої системи землеустрою як еколого-економічного інструменту забезпечення сталого розвитку аграрного сектора. Істотні підняті питання формування високоефективного сільськогосподарського землекористування у процесі, вивчення світового позитивного досвіду щодо реалізації принципів просторового планування територій і застосування їх в нашій країні. В результаті проведеного дослідження було проаналізовано світовий досвід землепорядного проектування при формуванні сталого використання сільськогосподарських земель. Розкрито суть основних напрямків

імплементації світового досвіду просторового планування території в процесі реалізації еколого-економічного механізму сталого використання земель в Україні. Досліджено зарубіжний досвід використання землевпорядного механізму для забезпечення сталого використання сільськогосподарських земель на основі просторового планування сільських територій, як самостійних об'єктів управління.

Ключові слова: *сталий розвиток, просторове планування, децентралізація, територіальна громада, регіон.*

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АНАЛИЗ МИРОВОГО ОПЫТА ФОРМИРОВАНИЯ СЕЛЬСКОХОЗЯЙСТВЕННЫХ ЗЕМЛЕПОЛЬЗОВАНИЙ В ПРОСТРАНСТВЕННОМ ПЛАНИРОВАНИИ ТЕРРИТОРИЙ

Метод землеустройства является основным инструментом организации устойчивого использования и охраны земель в процессе формирования сельскохозяйственных землепользования при пространственном планировании территорий, поэтому важно рассмотреть эффективность существующей системы землеустройства как эколого-экономического инструмента обеспечения устойчивого развития аграрного сектора. Существенные подняты вопросы формирования высокоэффективного сельскохозяйственного землекористування в процессе, изучение мирового положительного опыта по реализации принципов пространственного планирования территорий и применения их в нашей стране. В результате проведенного исследования были проанализированы мировой опыт землеустроительного проектирования при формировании устойчивого использования сельскохозяйственных земель. Раскрыта суть основных направлений имплементации мирового опыта пространственного планирования территории в процессе реализации эколого-экономического механизма устойчивого использования земель в Украине. Исследован зарубежный опыт

использования землеустроительного механизма для обеспечения устойчивого использования сельскохозяйственных земель на основе пространственного планирования сельских территорий, как самостоятельных объектов управления.

Ключевые слова: *устойчивое развитие, пространственное планирование, децентрализация, территориальная община, регион.*