

**THE CONCEPTS AND THE ESSENCE OF NON-CONVENTIONAL  
AGRICULTURAL LAND USE, ITS ENVIRONMENTAL FRIENDLINESS  
AND CAPITALIZATION**

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*In this article the concepts and essential features of non-conventional agricultural land use have been defined. The main economic and land management actions were designated to ensure the greening and capitalization of non-conventional agricultural land use.*

*In modern economic science, the terms "organic farming" and "non-conventional farming" are often used at the same time and often equated. However, in our opinion, there are a number of differences between them, so it is necessary to harmonize the interpretation of relevant concepts and categories.*

*Non-conventional land use should be understood as the process of organizing economically efficient, environmentally friendly and socially-oriented use of agricultural land as means of basic production in close interaction with the environment, and with land ownership relations (where human and its intellect are the key to the formation of land capital). Key aspects of the essence of non-conventional land use are its greening and capitalization. This can be provided by the following means: studying of the land and soil suitability for growing, for example, niche crops, within the land use; working out different options for the non-conventional land use development; land management options development and implementation of land improvements; developing a forecast for the economic efficiency of land use; deciding on the feasibility of organizing non-conventional land use; development of an economic management plan for the organization of non-conventional land use.*

**Keywords.** *non-conventional agricultural land use, niche crops, non-conventional farming, land use greening, land use capitalization.*

**Problem setting.** Scientists of many countries are adamant that global warming can lead to an increase in the harmfulness of thermal stress, to a decrease in plant productivity and to increase number of generations of of many pathogen diseases, etc. That is why agriculture should adapt to it more than other industries. In this respect, in our view, non-conventional agricultural land use is an effective way of climate stabilization , greening and capitalization. Climate change is already well seen in the south of Ukraine, where it is imperative to restore and expand the artificial moistening of crops, and in the northern and central regions to revise the crop set and sow drought-tolerant plants typical of the Southern Steppe or to implement the irrigation.

In recent years, farmers have increasingly turned their attention to so-called "niche" crops, that is, low-prevalent non-traditional crops that have high economic efficiency, the new products can be profitable in the domestic and foreign markets, because their level of competition is quite low, according to Raisa Vozhegova, the director of the Institute of Irrigated Agriculture, NAAS [1]. Their cultivation has a positive impact on the preservation and restoration of ecosystems, and the net income per area unit (important for both the farm and the community where it operates) can reach tens and sometimes hundreds of thousands of hryvnias per hectare. This has a positive impact on soil fertility and phytosanitary state of crops and plantations, as the level of biological diversity of crop rotations at farms increases. In addition, the economic risks of crop shortfall or crop loss are reduced, as niche plants can compensate it a certain way.

Over the last ten years, deliveries of Ukrainian niche products to foreign markets have increased significantly. In particular, exports of beans and coriander have increased 2.4 times, nuts - 1.5 times, mustard seeds - 1.7 times, strawberries - 9.8 times, chickpeas - 10 times [2]. For example, the asparagus market in the EU has grown by almost 30 percent over the last 10 years (Fig. 1) [3].

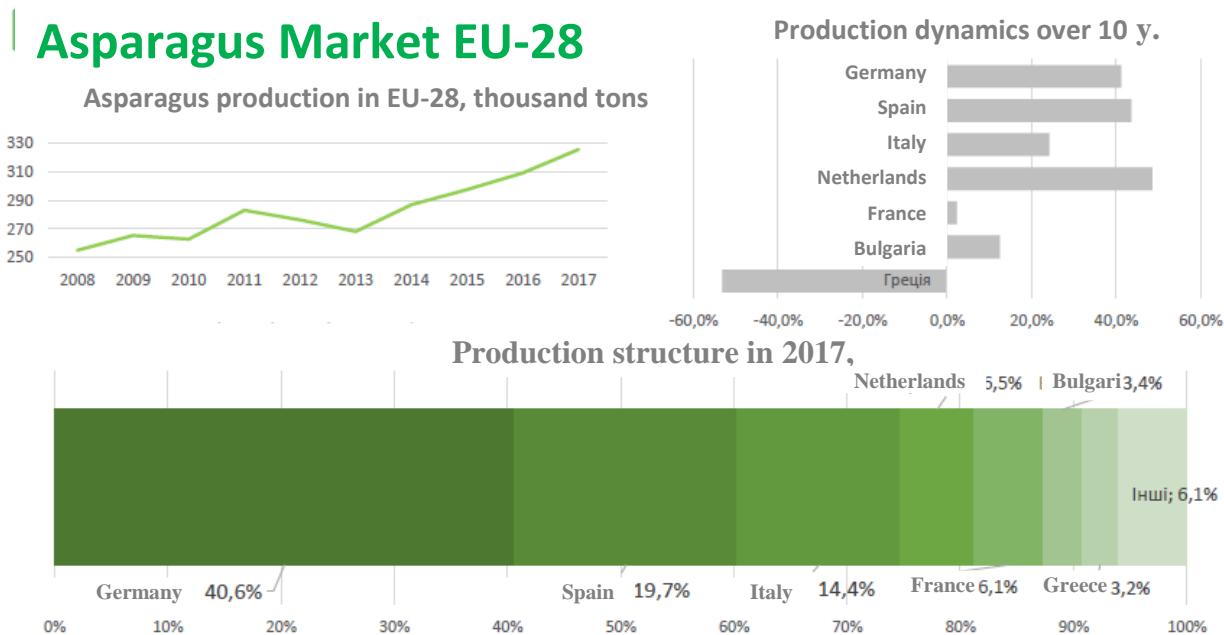


Figure 1. The asparagus market in EU countries

According to FAOstat, in 2017 it was mostly grown in Germany (40.6%). Germany is the fourth in the world and the first producer of asparagus in Europe. It is also the second in the world and the first importer of asparagus in Europe. Imports amount to 25,000 tonnes worth of 99 million Euros, which is 25% of European imports in 2017. At the same time, in Germany the value of agricultural land is more than 10 times higher than in Ukraine.

According to O. Khodakivskaya, “Small agricultural business owners should focus on those types of products that have a steadily increasing demand both in the domestic and foreign markets. And also for those which are able to provide the greatest return - from 30 thousand UAH to 100 thousand UAH - per 1 ha”. These will soon be organic products, as well as nuts, beans, spices, sorghum, chickpeas, peas, lentils, mustard, flax, hemp, nuts, berries: raspberries, strawberries, blackberries, blueberries, cranberries, etc,

**Objective of the article** is the definitions of concepts and essence of non-conventional agricultural land use in Ukraine and its impact on the greening and capitalization of land use.я.

**Study results.** Innovative processes in agriculture require scientific justification, in particular, land use systems. After all, the term "agriculture" characterizes only a set of agro-technological operations for growing agricultural products, with the land considered only as a means of production. The use of the concept of "*land use*" implies a system of relations about the use of land not only as a means of production, but also as an object of nature, which is in close interaction with the environment, where it dominates. Therefore, there is a need to introduce the term "*non-conventional land use*" as a process of economically efficient, environmentally friendly and socially oriented use of agricultural land. In this regard, the development of methodological support for the management of the process of protection and rational use of land, including greening and capitalization of land use, is relevant.

The term "land use" is understood by scientists as a complex, multifactorial system that includes three main subsystems:

subjective (*land users, landowners, state*);

objective (*land, land parcel*);

technological (*actually the land use*).

In other words, *land use* is an objectively predetermined by human process of involving the land into production and non-productive activity, its reproduction and protection. We should agree with A.M. Tretiak, who is considering land use as an ecological system, which is a territorial complex of optimal interconnections of soil, organisms and atmosphere through the composition and structure of land, the system of organization and methods of land use and other natural resources [4]. This understanding of land use reflects the interaction of the environment, society and human being.

From a legal point of view, land use law is a system of legal rules enshrined in land legislation that governs public relations associated with the extraction of beneficial properties of land resources. The evolution of scientific thought distinguishes between agricultural, sustainable and environmentally friendly land use.

According to the Law of Ukraine "On Land Management" in the version up to 2012 [5], sustainable land use was understood as a form and corresponding methods of land use that provide optimal parameters of ecological and socio-economic functions of territories. Thus, the formation of sustainable (balanced) land use implies cost-effective, ecologically safe (environmentally friendly) and socially beneficial use of land and other natural resources which are located on land and are not separable from it.

Balanced land use as a result of the implementation of the principle of rational use of land resources aims to create a stable base for economic development of agricultural production while improving the quality of life of the population. Thus, the point at issue is that balanced land use is a vector that determines the ability to achieve sustainable development of the agricultural land use and the agrarian sector, in particular through a resource factor. Such conceptual provisions are reflected in the writings of S.A. Podolynsky, who wrote that the use of environmental resources in the process of economic activity should match its ability to renew such resources.

An alternative and innovative way of developing agriculture in the direction of greening and capitalization is the introduction of non-conventional land use. This requires clarification of the essence and content of the theoretical and methodological apparatus for unconventional land use. In modern economic science, the terms "organic farming" and "non-conventional farming" are used at the same time, which are often identical. However, in our opinion, there are a number of differences between them, so it is necessary to agree on the interpretation of relevant concepts and categories.






According to the definition given by the EU Council Resolution [6], organic production is an integral food management and production system that combines best practices in terms of environmental conservation, biological diversity, conservation of natural resources, the application of high standards of keeping animals and a production method that meets certain requirements for products made using substances and processes of natural origin.

Along with the term "organic production" is widely used the term "organic farming". The concept of "agriculture" or "system of agriculture" means a set of interrelated principles, rules, practices, measures of organizational, economic, agro-technical, meliorative nature with the use of land in a certain territory for the production of agricultural products, reproduction and increase of soil fertility with available climate conditions [7]. During the historical development there were primitive, extensive, transitional and intensive systems of agriculture. Today, ecologically oriented farming systems such as ecological, biodynamic, No-Till, and organic have become relevant [8].

Combining the technological process of land use not only as a means of production, but also as an object of nature, which is in close interaction with the environment and with the ownership of land (where man and his intellect are key to the formation of land capital), we offer conceptual foundations for the development of non-conventional land use (Figure 2).

After all, the market is constantly "pushing" agricultural producers and farmers to grow new crops. Niche crops production should be linked to an inclusive economy, which is one of the goals of the 2030 global targets that Ukraine needs to adapt to its conditions. It is therefore necessary to create legislative and regulatory frameworks and an institutional regulatory environment that would improve the development of agricultural land use in general and non-conventional in particular.

Greening and capitalization are key to implementing non-conventional land use. Measures to achieve this aim include:

-  study of the suitability of land and soil for cultivation, for example, of niche crops within land use;
-  developing options for the development of non-conventional land use;
-  development of land management options and implementation of land improvements;
-  development of a forecast of the economic efficiency of land-use;
-  deciding on the feasibility of organizing unconventional land use;

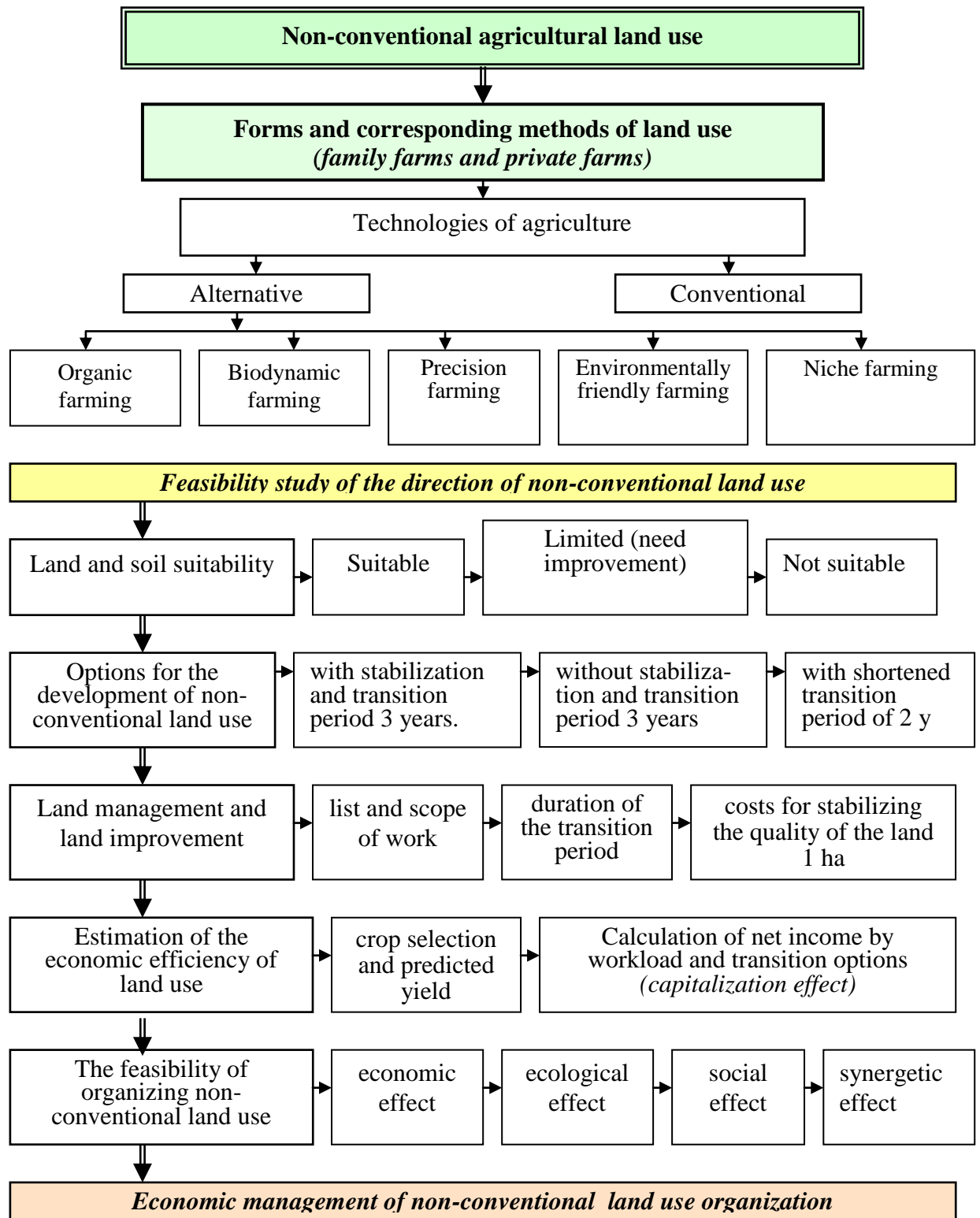


Figure 2. Logical and conceptual model of the organization of non-conventional agricultural land use.

✚ development of economic management plan for non-traditional land use organization.

**Conclusions.** Non-conventional land use should be understood as the process of organizing economically efficient, environmentally friendly and socially-oriented use of agricultural land as means of basic production in close interaction with the environment, and with ownership of land (where man and his intellect are key to the formation of land capital). ). Key aspects of the essence of non-conventional land use are its greening and capitalization. This can be provided by the following means: studying of the land and soil suitability for growing, for example, niche crops, within the land use; working out different options for the non-conventional land use development; land management options development and implementation of land improvements; developing a forecast for the economic efficiency of land use; deciding on the feasibility of organizing non-conventional land use; development of an economic management plan for the organization of non-conventional land use.

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### **Поняття та сутність нетрадиційного сільськогосподарського землекористування та його екологізації і капіталізації**

*Анотація.* Сформовано поняття та сутнісні ознаки нетрадиційного сільськогосподарського землекористування. Визначені основні економіко-землевпорядні дії щодо забезпечення екологізації і капіталізації нетрадиційного сільськогосподарського землекористування.

В сучасній економічній науці одночасно використовуються терміни «органічне землеробство» та «нетрадиційне землеробство», які часто ототожнюють між собою. Проте, на нашу думку, між ними існує ряд відмінностей, тому, необхідно узгодити трактування відповідних понять і категорій.

Під нетрадиційним землекористуванням необхідно розуміти процес організації економічно ефективного, екологобезпечного та соціально-орієнтованого використання сільськогосподарських земель як засобу основного виробництва в тісній взаємодії з навколишнім природним середовищем, та із відносинами власності на землю (де людина та її інтелект є ключовими що формування земельного капіталу). Ключовими аспектами сутності нетрадиційного землекористування є його екологізації та капіталізації. Заходами, які їх забезпечать є: вивчення придатності земель і ґрунтів для вирощування, наприклад, нішевих культур, у межах землекористування; розроблення варіантів розвитку нетрадиційного землекористування; розроблення варіантів землевпорядкування та здійснення земельних поліпшень; розроблення прогностичної оцінки економічної ефективності землекористування; прийняття рішення щодо доцільності організації нетрадиційного

землекористування; розроблення плану економічного менеджменту організації нетрадиційного землекористування.

**Ключові слова.** нетрадиційне сільськогосподарське землекористування, нішеві культури, нетрадиційне землеробство, екологізація землекористування, капіталізація землекористування.

**В. Н. Третьяк, В.Б. Ляшинский**

## **ПОНЯТИЕ И СУТЬ НЕТРАДИЦИОННОГО СЕЛЬСКОХОЗЯЙСТВЕННОГО ЗЕМЛЕПОЛЬЗОВАНИЯ И ЕГО ЭКОЛОГИЗАЦИИ И КАПИТАЛИЗАЦИИ**

**Аннотация.** Сформировано понятие и признаки сути нетрадиционного сельскохозяйственного землепользования. Определены основные экономико-землеустроительные действия по обеспечению экологизации и капитализации нетрадиционного сельскохозяйственного землепользования.

В современной экономической науке одновременно используются термины «органическое земледелие» и «нетрадиционное земледелие», которые часто отождествляют между собой. Однако, по нашему мнению, между ними существует ряд различий, поэтому, необходимо согласовать трактовки соответствующих понятий и категорий.

Под нетрадиционным землепользованием необходимо понимать процесс организации экономически эффективного, экологически безопасного и социально-ориентированного использования сельскохозяйственных земель как средства основного производства в тесном взаимодействии с окружающей средой, и с отношениями собственности на землю (где человек и его интеллект являются ключевыми в формировании земельного капитала). Ключевыми аспектами сути нетрадиционного землепользования является его экологизация и капитализация. Мерами, которые их обеспечат являются: изучение пригодности земель и почв для выращивания, например, нишевых культур, в рамках землепользования; разработка вариантов развития нетрадиционного землепользования; разработка вариантов землеустройства и

осуществления земельных улучшений; разработка прогнозной оценки экономической эффективности землепользования; принятия решения о целесообразности организации нетрадиционного землепользования; разработка плана экономического менеджмента организации нетрадиционного землепользования.

**Ключевые слова.** нетрадиционное сельскохозяйственное землепользование, нишевые культуры, нетрадиционное земледелие, экологизация землепользования, капитализация землепользования.