

## **THEORETICAL AND METHODOLOGICAL BASICS OF DIVERSE TYPES OF NATURAL ZONING OF LANDS**

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Presented the theoretic and methodological basics of diverse types of natural zoning of lands (territories), which consist in the systematization and typization of types and kinds of zoning, the development of principles and the justification of classification features of zoning.

Article 26 of the Law of Ukraine "On land protection" stipulates that for rational use of land and soils, different types of zoning of lands are carried out, in particular, natural-agricultural, ecological-economic, anti-erosion, etc. For the needs of agriculture, land zoning is also carried out according to the degree of soil provision with nutrients, trace elements and the suitability of soils for growing crops, etc.

Materials of natural zoning are used in establishing requirements for the rational use of land, determining areas that require special protection from anthropogenic pressure, the regulation of the necessary types of environmental restrictions in the use of degraded lands and the restoration of their productivity. Also for determining the environmentally clear areas for the production of raw materials for children's and dietary nutrition, and obtaining ecologically friendly food products and food raw materials, etc.

Today, researchers mean different content in the definition of zoning of lands (territories). The most appropriate for us is the following definition of zoning – the division of the studied territory into co-dimensional taxonomic elements, characterized by internal similarity and external differences in natural and other conditions. In addition, it should be kept in mind that this is not only a division and description, but first of all detection, and then the allocation of taxonomic units. The result of zoning is a network of districts that reflects the specificity of the district's territory and the hierarchy of geosystems inherent in the territorial organization. In this case, the areas of one, and different levels of the hierarchy must meet the predefined typological and classification characteristics.

In practice, various theoretical and methodological variants of zoning of lands (territories) are used. They are divided into 2 types, 5 kinds and several varieties.

Natural zoning is carried out according to the principles based on the classification criteria selected by the researcher. Principles and features of zoning – are different concepts, they can not be confused. Principles are those logical rules, the most important methodological basics that must be observed in the conduct of any type, kind and variety of zoning. Under the features (classification) of zoning understand those selected and justified by the researcher features, on the basis of which the division of territory occurs in the regional (individual) zoning, classification (typization) of

territorial units of a certain rank with typological zoning or the complexity assessment of natural conditions in the valuation zoning.

The formulation of the principles of natural zoning of the territory of Ukraine began in his writings V. Dokuchaev. On the basis of the generalization of published works, we formulated the basic principles of natural zoning.

Questions about classification features of zoning are also important. After all, the correct choice of certain features essentially determines the content and depth of natural zoning. This question is also extremely important, because the selection and systematization of classification features is the first stage of zoning, preceded by the identification and allocation of territorial units of different rank, the mapping of the boundaries between the allocated units in those places where these signs are changing (the second stage of zoning).

Land zoning is carried out on the following grounds (criteria):

- natural and agricultural – the degree of heat and humidity of the territory, hydrothermal coefficient, the sum of active temperatures above +10 °C, composition and characteristics of soils (specific weight of eroded, hydromorphic, saline, flooded soils, etc.) and degree of drainage of the territory;
- ecological and economic – the level of transformation of the natural environment, its resistance to anthropogenic pressure and the degree of damage to the territory by negative geological processes;
- anti-erosion – intensity of erosion processes, their causes, degree and dynamics of soil erosion, uniformity of anti erosion measures;
- other kinds – the quantitative content of toxic pollutants (pesticides, heavy metals, radionuclides, etc.), trace elements and the degree of suitability of soils for growing crops, etc.

As a result of the work on zoning of land, the corresponding Schemes (maps) are drawn up, in which the following data are displayed:

- natural and agricultural – the structure of land (including agricultural), soil cover, its qualitative status, the presence of most valuable lands, as well as degraded and unproductive soils, classification indices of the suitability of arable land for growing crops, etc.;
- ecological and economic – the degree of transformation of the natural environment due to anthropogenic impact, the level of use (attraction) of natural resources, characteristics of natural resource potential, environmental durability against the anthropogenic pressure, level of this pressure, adverse natural and anthropogenic processes and ecological and economic assessment of the territory;
- anti-erosion – conditions of soil erosion, intensity of erosion processes, their dynamics, natural and anthropogenic preconditions for the development of erosion;
- ecological – soil contamination with pesticides, heavy metals, radionuclides, etc.

Examples of individual (developed) types of zoning are presented and prospects for further research are presented.

Today, the natural-agricultural zoning of lands (territories) of Ukraine is developed at the national level, and needs to be developed at the intraregional level.

A new methodological approach to erosion zoning was developed at the Institute of Land Management of the Ukrainian Academy of Agrarian Sciences, based not only

on the degree of soil erosion, but also on the estimated intensity of erosion processes, their dynamics, natural and anthropogenic factors of erosion, etc. Considering this O. Kanash and S. Osipchuk carried out a scientific substantiation and developed a Scheme (map) of erosion zoning of agricultural lands in Ukraine.

Currently, the Scheme of ecological and economic zoning of the territory of Ukraine developed by V. Baranovsky is the most acceptable.

There was a need to implement geobotanical zoning of natural forage lands of Ukraine, which should be based on the results of geo-botanical surveys. The land-value zoning of the territory of Ukraine needs to be updated, which was held in the eighties of the last century.