

Land and Natural Resources in the Constitutional Subjects of the Eastern European Countries and the Regional Experience of Adaptation of the Land use in the Reform of Land Relations

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Abstract: The study explores the constitutional positions of Russian Federation and the countries of the Eastern Europe in relation to the land and other natural resources. The analysis of constitutional texts made it possible to identify general and specific constitutional features of the object under study, approaches to its axiological ranking, particularization, structuring, preservation and protection including the possibility of limiting other constitutional rights and institutions. This in its entirety, determines the state management in the sphere of the land and natural resources relations and creates the basis for their reform at the regional level. Taking this into consideration, a generalized regional experience in the adaptation of the land use is presented. Using the developed concept, the proprietary methodology and the design results for the first time in Russian federation, a scientific guidance for the program of introducing the catchment-based agricultural land organization for one of the regions of the country is provided.

Key words: Protection land, constitution, land resources, land use, agricultural lands, ownership of land

INTRODUCTION

The land and other natural resources constitute a very fruitful object of study for both the natural and social sciences. They use their own intrinsic tools increase the knowledge of the object and its structure, identify the laws of its transformation, propose concepts and methods for its preservation and protection. In particular, the land and other natural resources are analysed from the environmental (Tompkins and Adger, 2004) and economic positions (Johnson, 2002; Ploeg, 2011), from the point of view of the governmental and other public administration (Belyakova, 2012) as an object of property (Ciriacy-Wantrup and Bishop, 1975; Bogolyubov, 2009; Shmakov, 2012; Saurin, 2014; Pozdnyakov, 2015; Eliseeva, 2016), legal regulation and legal protection (Evsegneev, 2012; Tyutyunik, 2013; Bogolyubov, 2016; Kharkov, 2016) in connection with the rights of indigenous peoples (Anaya and Williams Jr., 2001; Sleptsova and Rakhto, 2015), etc.

At the same time, the land and other natural resources constitute the material basis of the territory of the states and naturally receive their initial status characteristics in their constitutions. It is in the

constitutional formulations that the quintessence of the state's perception of the land and other natural resources is reflected. In order to identify this as well as the general and specific features in the relevant approaches of the states, we will analyse the texts of the constitutions of Russian Federation and other 15 Eastern European countries. As is known, the norms of constitutions are intended to determine the further legal regulation of public relations including those related to the land and other natural resources. Taking Russian Federation and one of its entities, the Belgorod region as an example, we will consider approaches to solving a number of problems related to the land and other natural resources.

Regions with intensive agricultural activities such as the region chosen by us for the study, need to use project solutions that can ensure a compromise between the economically viable intensity of the agricultural production and stable crop yields and the formation of resource-saving land use practices in environmentally sustainable agricultural landscapes. The land use planning should be provided with both a scientific substantiation for project activities in the land use alternative and legal grounds.

MATERIALS AND METHODS

Various general scientific methods and methods of logical cognition are used in the research: analysis and synthesis, abstraction, systemic and formal-logical approaches. The achievement of the stated goal was facilitated by the application of the content analysis formal legal and comparative legal methods.

The development of activities within the framework of the basin organization of land management practices (Lisetskii *et al.*, 2014) requires the application of new methods for the complex analysis of various data, their spatial and temporal ordination as well as for visualization of the obtained results. In this respect an integral approach to geo-planning of rural areas based on the basin organization of the use of natural resources and technological capabilities of GIS-designing and remote sensing has wide possibilities (Yermolaev *et al.*, 2015). The assessment of the ecological and economic situation within the catchment area has been made using ArcGIS, Version 10.1. The remote sensing data allow assessing the spatial structure of land management, its changes and also, the soil fertility resources. The systematization of all spatial layers and their integration into a single geodatabase was completed. The final list of spatial data includes 33 thematic sets in the shape file format with attributive information. When developing the projects of the basin organizations of lands, we used the GIS-analysis tools which allows creating digital terrain and locality models an objective substantiation of watershed boundaries, determining the paths of possible migration of toxic substances, marking out natural and anthropogenic elements of the landscape which play the role of geochemical barriers, determining favourable territorial zones for measures to inactivate the accumulated toxicants, designing the elements of the soil and water protection system development. As a result of the geo-planning of catchments, 26,900 km² which constitute 99% of the territory of the Belgorod region are proposed for the development.

RESULTS AND DISCUSSION

The initial analysis showed that the constitutions of Bosnia and Herzegovina, Latvia and Poland do not mention the land and other natural resources. The constitutions of other 13 countries implemented sovereign approaches to the embodiment of the object under study. This relates to both the compositional arrangement of norms on the land and other natural resources, the number of such norms and their informativeness and the degree of concretization of the object.

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In the constitutions of this focal group of states, the norms on the land and other natural resources are predominantly arranged and located in the main text. In three countries-Lithuania, Russian Federation and the Czech Republic-the provisions relating to the object under study were also embodied in the so-called preamble. Traditionally, its provisions have no legal force but point to basic values (Markhgeym, 2017). Therefore, the reflection in it of the provisions on the land and other natural resources, along with a specific lexical solution, emphasizes the axiological approach to it. Thus, in the preamble of the Lithuanian Constitution, it is stipulated that this law is adopted and proclaimed by the Lithuanian people “embodying the natural right of the man and the people to live and create freely on the land of their fathers and ancestors caring about the national consent on the land of Lithuania”. The preamble of the Russian Constitution establishes that it is adopted by the multinational people of Russia, united by a “common fate on their land”. In the Preamble of the constitution of the Czech Republic (Markheim *et al.*, 2015) in the best manifestations of a solidary society, it is reflected that citizens of the Czech Republic adopt the constitution “determined to jointly protect and develop the inherited natural wealth”. While in the first two cases the land is mentioned in the context of the territory, then in the third case as a natural wealth.

The number of constitutional norms on land and other natural resources varies from one (Albania, Hungary, Cyprus, Czech Republic) to six (Croatia). Naturally, the wordings of such norms do not coincide, since, the land and other natural resources are embodied in various capacities. In particular, they are defined as national wealth/heritage/property as objects of property, preservation and protection.

The land and other natural resources are constitutionally defined as the basic national resource, “which enjoys the special protection of the state and society” (Bulgaria, Article 21 (1)) “which must be used economically” (Estonia, Article 5) as a part of the “common national heritage, preservation of which for future generations is an obligation of the state and all others” (Hungary, Article O (2)) as a public asset and

natural heritage which everyone, the state and local communities are obliged to protect and promote the preservation of (Slovenia, Articles 70, 73).

The protection of land and other natural resources is classified as a basic value of the constitutional order (Macedonia, Article 8) as highest values of the constitutional order (Croatia, Article 3) are defined as the basis of "life and activity of the people living in the corresponding territories" (Russian Federation, Part 1, Article 9) which fits the content of the principle of justice (Kuksin *et al.*, 2016).

As an area of the state's care, the following is constitutionally determined: the protection of the natural environment, wildlife and plants individual objects of nature, their restoration and increase (Lithuania, Article 54) economical exploitation of natural resources, ecological balance and an effective environmental policy (Slovakia, Part 4, Article 44) the preservation of the natural heritage (Slovenia, Article 73) the protection of the nature and the environment (Croatia, Article 69) a prudent use of its natural resources and the protection of the natural wealth (Czech, Article 7). A peculiar constitutional formulation is embodied in Albania (Article 59 f), according to which the state aims at "the rational exploitation of forests, waters, pastures and other natural resources on the basis of the principle of a sustainable development".

From the position of the obligation of the state/everyone there are determined: preservation of natural resources, especially, arable land and the drinking water supplies for future generations (Hungary, Article "O" (2)), exploitation of natural resources in conformity with national interests, environmental protection and recovery, preservation of the ecological balance (Romania, Article 134 (d), e)), protection and improvement of the environment (Slovakia, Article 44) preservation of natural sites of special interest and rarities (Slovenia, Article 3), a careful attitude to the environment and compensation in accordance with the law for the damage caused to the environment (Estonia, Article 53). Besides in compliance with the constitution, the state is required to ensure the protection and reproduction of the environment, the rational utilization of the natural wealth and resources of the country (Bulgaria, Article 15).

Quite uniquely in conjunction with public interest determined by law is presented the constitutional attitude to the natural wealth (Macedonia, Article 56), to the concretized natural riches (sea, seashore and islands, waters, air space, mineral resources) and natural assets (land forests, flora and fauna) (Croatia, Article 52) by virtue of which they enjoy a special protection.

An analysis of the constitutional texts of the countries of the Eastern European showed that the land and other natural resources have been given concretized characteristics in relation to the property: its object, type,

exclusive or possible owner, the procedure for acquiring ownership and its restrictions, specific features of protection, etc. are established. The most general wording is used in Part 2, Article 9 of the Constitution of Russian Federation, according to which "The land and other natural resources may be in private, state, municipal and other forms of ownership".

As exclusive state property is determined the relevant minerals, waters forests, natural reserves (Bulgaria, Part (1), Article 18) the subsurface internal waters forests, parks of state importance (Lithuania, part 4, Article 47) the mineral resources of any nature, the natural resources of the economic zone and the continental shelf (Romania, Article 135 (4)), the mineral resources, caves, underground waters, natural healing sources and streams (Slovakia, Article 4). The underground water, minerals and antiquities are determined as reserved by the republic (Cyprus, Part 1, Article 23).

Beside the state, the land and other natural resources as a rule, may be owned by its citizens. In the constitutional formulations, two approaches of states were identified for the embodiment of these provision the establishment of the right and the establishment of the ban. In the first case, it is determined that the land inland waters forests may be owned only by the citizens of the republic (Lithuania, Article 47) citizens and their associations have the right to private ownership of the land (Russian Federation, 1, Article 36). In the second case, this is completely banned (Romania, Article 40 (2) "Foreign citizens and stateless persons may not acquire the right to private property of land plots") or special conditions (Bulgaria, Article 22 (1) "Aliens or non-resident legal persons may not acquire ownership of the land except by way of inheritance according to the law" Slovenia, Article 68 "Aliens may not acquire the right of ownership to land except by way of inheritance under the conditions reciprocity", Lithuania, Article 47 "self-governing entities, other national subjects and foreign entities carrying out their economic activity in Lithuania may be permitted to acquire the ownership of non-agricultural land plots").

The analysis of the texts of the constitutions of the group of the countries under study also showed that in two of them the agricultural land has additional statutory guarantees. Thus, the arable land shall be used solely for agricultural purposes and any change of the assigned use of arable land shall be permissible solely by exception, provided the necessity has been proven and under terms and according to a procedure established by statute. (Bulgaria, Article 21 (2)) the law establishes a special protection of agricultural land (Slovenia, Article 71).

An essential constitutional feature of status of the land and other natural resources is that in order to protect them, there is a provision for the possibility of restricting other constitutional rights and institutions. For example,

the law may restrict freedom of market relations and entrepreneurship solely for the purpose of protecting the nature and the environment (or public health) (Macedonia, Article 55) as an exception, the free enterprise and property rights may be exceptionally restricted by law for the purposes of protecting the nature and the environment (Croatia, Article 50) in the cases and by procedures established by the law, the right of free movement may be restricted for the protection of the natural environment (Estonia, Article 54) possession, utilization and disposal of land and other natural resources is exercised by the owners freely, if it is not detrimental to the environment and does not violate the rights and lawful interests of other people (Russian Federation, 2, Article 36).

With reference to Russian Federation, we note that in its constitution (Part 1, Article 72) the issues of ownership, use and disposal of land, subsoil and other natural resources (part “c”), utilization of natural resources, protection of the environment and ensuring ecological safety (clause “e”), land, water and forest legislation; subsoil legislation and environmental protection legislation (item “j”) fall under the joint jurisdiction of the Federation and its subjects. This means that federal laws are issued on these issues and laws and other normative legal acts of the Russian constituent subjects are adopted in accordance with them. Taking this into consideration, relevant legislation and targeted programs are adopted, projects are implemented which are intended among other things, to adapt the land use when reforming the land relations. In this regard, the experience of one of the most agriculturally developed regions of Russia the Belgorod region which was the first to implement the concept of an adaptive landscape and a biological farming system is of interest.

The soil-protecting organization of the territory of agricultural producers must be the basis that will unite all elements of the soil protection system for sloping lands into a single whole. The most important element in this should be a scientifically based organization of the arable land. Since, the arable land is the main source of agricultural products and a guarantee of food security, its legal use is strictly controlled by the state. The Federal Law “On the turnover of agricultural land” regulates the basic principle of the turnover of agricultural land the preservation of the intended use of the land. According to the Federal Law “On the transfer of land or land plots from one category into another”, the transfer of the agricultural land into other categories is allowed only in

exceptional cases related to the urban development industrial activities as well as unsuitability of such land for agricultural production.

The land management on catchment based principles determined the task of finding a compromise between achieving an environmental sustainability of agrolandscapes and economically advantageous intensity of the agricultural production ensuring stable harvests. Using of GIS technologies and database management in soil science is prospective and modern approach for storage and modeling of spatial information (Okunade, 2010).

The implemented methodology of territorial organization of the land resources on the catchment-based principles (Lisetskii *et al.*, 2014) includes the following stages: the collection of qualitative and quantitative information on the natural, social and economic potential of the catchment area of the river, the reorganization of the structure of lands, taking into account the environmental, economic preconditions and regulatory framework, calculation of the project’s environmental efficiency using the indices of the natural protection and environmental stability, the calculation of the economic efficiency of the organization of the territory. Since, more than 60% of the territory of the Belgorod region is represented by arable land, its development on the area of 1.5 million hectares was a key element of the soil preserving organization of the nature management. The optimal way to reorganize the arable lands with the aim of increasing the ecological sustainability of the territory is to increase the percentage of perennial grasses in the crop rotation structure.

The optimization of the structure of the arable land with its transition to the biological agriculture provides for:

- Spatial organization of crop rotations, taking into account the slope gradients
- Increase in the area of perennial grasses in the structure of the crop rotation
- Introduction of green manure and intermediate crops
- Minimization of soil cultivation by switching to direct seeding technology
- Planting of forest belts on erosion-hazardous slopes
- Organization of bee yards

Taking into consideration the landscape features of the catchments areas, three types of crop rotations (field, grain-grass and soil-protective) and erosion control measures (grassed waterways forest belts, preservation) have been planned for the arable land (Fig. 1).

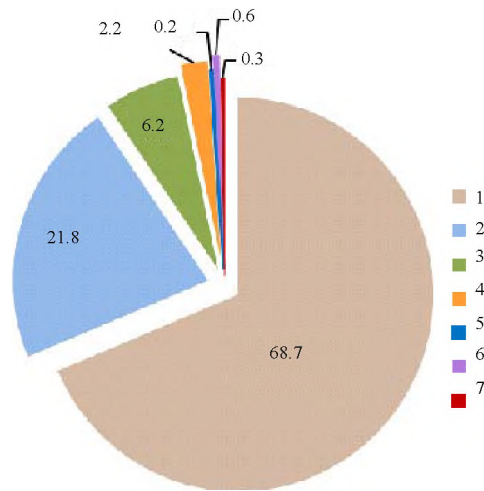


Fig. 1: The results of the land use transformation on the agricultural lands in the Belgorod region by 2018 based on the results of design work; 1) Field crop rotation; 2) Grain-crop rotation; 3) Soil-protecting crop rotation; 4) Bee plants; 5) Forest belts; 6) Preservation of lands and 7) Grassed waterways

The organization of arable land with the catchment-based nature management should be ensured both legally and with the help of scientifically substantiated project activities in the land use alternative (Table 1).

The stabilization of the environmental situation in the region was achieved by redistributing the types of land and changing their use provisions (Table 1) and the effectiveness of geo-planning based on the concept of catchment-based use of natural resources was assessed by the developed targets and indicators. In the conditions of an active manifestation of erosion on the plowed land, resource indicators are of particular importance in soil and environmental monitoring, taking into account the spatio-temporal patterns of the formation of soil fertility resources (Ivanov and Lisetskiy, 1996; Lisetskii, 2008) (Table 2).

Analysis of the data on the distribution of agricultural lands among the title-holders after the constitutional reform of the land relations (1992-1994) and at present time (after the decision of the Belgorod Region government to purchase agricultural land in the ownership of the subject of Russia) showed that the

Table 1: Scientific and legal support for the organization of arable land

Criteria	Measures	Legal support
Gradient up to 3°, not washed away soils	Intensive use, straight-line organization of the territory	Priority national project "Development of the agricultural and industrial complex" (approved by the decision of the Government of Russian Federation of 2007 No. 446)
Gradient 3-5°, predominantly weak slope wash soils, the distance from the watershed not exceeding 200-300 m	Grain-grass crop rotation, contour-based organization of the territory	"The introduction of the biological farming system in the Belgorod Region for 2011-2018"
Gradient 3-5°, predominantly weak slope wash soils, the distance from the watershed not exceeding 200-300 m, terrain with micro depressions	Grain-grass crop rotation, grassed waterways. Strip arrangement of crops (4-6 sowing widths of the machine)	Resolution of the Government of the Russian Federation No. 830 "On approval of the regulations on the procedure for the preservation of land with their withdrawal from rotation" (2002)
Gradient 5-7°, predominantly medium slope wash soils, the distance from the watershed not exceeding 300-500 m	Soil-protecting crop rotation, contour-based organization of the territory	"Development of agriculture and fish farming in the Belgorod region in 2014-2020" (Resolution of the government of Belgorod region (No. 439, 2013 year)
Gradient 5-7°, predominantly medium slope wash soils, the distance from the watershed not exceeding 400-500 m, terrain with depressions	Preservation of arable land	Regional target program "Family farms of Belgorodie" (resolution of the Government of the Belgorod region (No. 134, 2007 year)
Gradient over 7°, predominantly strong slope wash soils, distance to the watershed exceeding 500 m	Transformation of arable land into forage lands	
Gradient over 7°, predominantly strong slope wash soils, distance from the watershed exceeding 500 m, the distance from bee yards not exceeding 1.5 km	Transformation into bee yards by sowing bee plants (entomophile's plants)	
Parcelling of arable land, forest belts, ecotones	Micro-reserves and refuge	
Strongly eroded lands on slopes with the gradient <math><16^\circ</math>	Preservation of land	Resolution of the Government of the Russian Federation No 830 "On approval of the Regulations on the procedure for the preservation of land with their withdrawal from rotation" (2002)
The lands exposed to contamination, secondary salinization, desiccation, compaction		

Table 2: Scientific and legal provision of land management in determining the type of use of fodder land

Measures	Type of land management activity	Legal support
The distance from the populated area is <1.5-2 km. A watering place available at the distance of 1-1.5 km	Arrangement of pastures with possible improvement of surface (fertilizing, disc plowing, soil slitting)	The project of involving the economic use of agricultural lands (except for arable land) in the Belgorod region in 2010-2012 for various investment projects
Steepness <12°		
Steepness not exceeding 16°, any distance from the populated area	Arrangement of hay-making activities Possible improvement, similar to that made to the pastures	Project for the development of sheep breeding and dairy goat breeding in the Belgorod region until 2015
Steepness more than 16°	Natural grass. It is possible to restore it with honey plants in case of proximity to bee yards or transformation into forest plantations	Regional target program "Family farms of Belogorie" (approved by resolution of the Government of the Belgorod Region of) (No. 134, 2007). Regulations for preservation of natural agricultural acreages (13.09.2013)

Table 3: Distribution of land in the Belgorod Region (thousand ha) by categories and forms of ownership

Land category	Total area	Owned land		
		Citizens	Legal entities	State and municipal
Agricultural land	2012.3	1650	155.9	206.4
Land of settlements	317.8	119.5	2.4	195.9
Lands of industry, transport communications and other special purpose lands	35.2	-	4.0	31.2
Lands of specially protected territories	2.4	-	-	2.4
Forest lands	215.0	-	-	215.0
Land of water fund	2.2	-	-	2.2
Stock lands	128.5	-	-	128.5
Total area, thou. ha%	2713.4/100	1769.5/65	162.3/6	781.6/29

structure of agricultural landowners as the result of the natural change in the land ownership on the basis of civil transactions has not changed significantly (Table 3).

The provisions that establish the pre-emptive right to purchase agricultural land are an effective mechanism for state control over the compliance of the current regulatory legal environment of land sale transactions. Organization of the realization by title-holders of agricultural lands of their rights to the land ensures a balanced interaction of the society and the nature, the preservation of a favourable environment. As to unscrupulous title holders of agricultural lands who bought out land plots into private ownership around major administrative centres, after finding out the violations of the provisions of the legislation on the proper use of agricultural lands and taking the administrative measures, the necessary documentary basis is being established as a justification for launching cases of judicial seizure of unused land plots.

Upon the results of implementation of the regional policy in the field of land relations, the Belgorod Region is in the lead among the regions of the Central Federal District in terms of the area of agricultural land that is registered as the state property of the subject of Russian Federation. According to the register, the region owns more than 30% of the total area of the agricultural land which allows a rapid implementation of

various projects of investments onto the agro-industrial complex of the region, a constructive influence on ensuring a stable long-term land use and the prevention of negative trends including those of a speculative nature.

CONCLUSION

The conducted study has shown that land and other natural resources are a typical object of constitutional legal regulation and are traditionally embodied into the text of the constitution. Most often, the land and other natural resources are recorded in connection with their preservation, protection and ownership. They are reflected in constitutional texts as a cumulative or concretized object, the protection of which may entail restriction of the freedom of market relations, entrepreneurship, movement and property rights. The special constitutional status of the land and other natural resources is emphasized by their definition as a national wealth, heritage, property or value. This is the reason for special measures of guaranteeing, preserving and protecting the land and other natural resources including by establishing appropriate obligations, addressed primarily to the state.

Land-use projects which rely on scientific and legal frameworks, must ensure ecological, economic and productive stability of catchments. The implementation of

the concept of organizing nature management on the catchments has become an integral part of the comprehensive regional program for the environmentally oriented development of the territories of the municipal and urban districts. The proposed approach to the organization of rational land and water use will contribute to the sustainable social and economic development of rural areas, the realization of the citizen's right to a favourable environment and the creation of a comfortable living space.

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