

Prospects of Agricultural Land Use in Krasnodar Territory in Respect to Territorial Features

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Abstract — The main problems of agricultural land use in the region are identified is the removal of plots from circulation, the spread of wind and water erosion, and the reduction of areas of particularly valuable productive lands. For example, the types of the placement of grape-suitable lands and lands with a yield class of more than 80 scores are given on the examples of two municipalities of Krasnodar Territory. The main regional features of the use of particularly valuable productive agricultural lands in Krasnodar Territory are established, and the examples of the introduction of other categories and other types of permitted use of viticultural and non-viticultural lands are shown. The need to clarify the boundaries of particularly valuable productive agricultural lands due to changes in legislation, a new round of cadastral assessment, partial withdrawal of them from agricultural turnover, and changes in the borders of localities are justified. It is concluded that it is necessary to develop a system for financing land management projects to establish the boundaries of particularly valuable productive agricultural lands and continue further researches on the problem.

Keywords — agricultural lands, territorial features, very valuable lands.

I. INTRODUCTION

The Russian Federation has a huge land area of 1.709.8 million hectares. Tundra, taiga, and mountain ranges account for a significant part of the area, while only 220.5 million hectares or 12.9 % are agricultural lands. This area is comparable to the area of similar lands in the 25 EU countries jointed. The share of the most valuable lands, namely arable lands, is even less – 7.1 %. However, in per capita terms, compared with other developed countries of the world, Russian parameters are quite high.

In view of the special value for society and great importance for agriculture, the legislation of the Russian Federation establishes restrictions on the withdrawal of agricultural lands from circulation, defines a special procedure for their transfer to other categories of lands and does not

allow unauthorized transfer of productive lands to non-productive.

However, over the past 20 years in the Russian Federation, there has been a regular decrease in the area of agricultural lands due to land degradation as a result of water and wind erosion, overgrowth of shrubs and small woodlands, reduction of humus content in the soil, compaction, waterlogging, flooding, salinization of soils [9, 14, 15].

In various regions of the country, land resources have significant features due to natural, climatic and socio-economic conditions. Krasnodar Territory is located in the south-western part of the North Caucasus and is the southernmost region of Russia, which has the most valuable chernozems.

According to the department of the Federal service of state registration, cadastre and cartography across Krasnodar Territory, on 01.01.2020 the area of the Land fund of Krasnodar Territory made up 7548.5 thousand hectares of agricultural lands and have a prevailing specific weight, occupying 4695.3 thousand hectares or 62.3 % of the total Land fund of the region, and influence the development of agrarian sector of economy of the whole country.

As a result of our research, we have identified the following problems that arise when using agricultural lands in the region.

1) From 1995 to 2020, agricultural lands in Krasnodar Territory decreased by 97.9 thousand hectares or 2 %. The area of agricultural lands in this category on 01.01.2020 was 4199.3 thousand hectares or 89.4 %. Given the economic significance in the agricultural economy, agricultural lands are subject to special protection in accordance with the Land Code of the Russian Federation [1]. Over the past 30 years, 183.7 thousand hectares or 3.8 % of productive agricultural lands were withdrawn from circulation and lost. Arable land area from 1990 to 2020 decreased by 107.2 thousand hectares or 2.6 %.

2) Uneven distribution of precipitation, sharp temperature fluctuations, destructive effect of dry weather and drought cause the development of wind and water erosion. Significant plowing of the area of Krasnodar Territory, which in some natural and economic zones reaches 87 %, increases the effect of soil erosion. This problem is aggravated by the lack of compliance with a scientifically based system of agriculture in the cultivation of agricultural crops, and the lack of anti-erosion measures.

According to the FSUE "Goszemkadastrsyemka", in 2008 3106.8 thousand hectares or 73 % of agricultural lands was deflationary in the region. At the same time, the area of deflated arable lands is 1063.4 thousand hectares or 27 %.

The total area of agricultural land subject to water erosion reached 903.2 thousand hectares or 21.5 %. Water erosion damaged almost all arable lands and perennial plantings on the slopes in the foothill and mountain agricultural landscapes of Krasnodar Territory.

Unique for Russia, the natural and climatic conditions of the southern foothill zone of the region have formed garden-suitable, grape-suitable, nut-suitable, tea-suitable lands, which in accordance with the legislation are classified as particularly valuable productive agricultural lands. In the conditions of annual decrease in their area, the reliability and completeness of information about the availability, actual use, condition, and forms of ownership of particularly valuable lands is of particular importance.

II. MATERIAL AND METHODOLOGY OF THE RESEARCH

It is established that the legislation does not provide a list of lands that can be classified as particularly valuable productive agricultural lands, and their areas are not defined by regions of Russia. In Krasnodar Territory, previously established borders have been violated as a result of the land relations reform. In addition, there is an insufficient methodological justification for setting the boundaries of particularly valuable productive agricultural lands.

In accordance with it, the purpose of the study is to establish the main regional features of the use of especially valuable productive agricultural lands in Krasnodar Territory, to identify problems of the actual use of these lands, to offer legal, economic and organizational ways to solve them.

The article uses materials from the department of the Federal service of state registration, cadastre and cartography of Krasnodar Territory, FSUE "Goszemkadastrsemka" and SUE KT "Kuban NI and PI land center". Abstract-logical, statistical, monographic, computational-constructive and cartographic research methods were applied.

III. THE RESULTS OF THE RESEARCH

According to the Land Code of the Russian Federation, especially valuable productive agricultural lands include agricultural lands of experimental production units of scientific organizations and educational and experimental units of educational organizations of higher education, agricultural lands whose cadastral value significantly exceeds the average

cadastral value of a municipal district (urban district) [1]. These lands may be included in the list of lands that are not allowed being used for other purposes in accordance with the legislation of the constituent entities of the Russian Federation.

In the law of Krasnodar Territory No. 532-KL "On the basis of land relations regulation in Krasnodar Territory" of November 5, 2002, the composition of especially valuable productive agricultural lands include lands whose cadastral value exceeds the average cadastral value of agricultural lands in a municipal district (urban district) by more than 5 percent [3].

In Krasnodar territory in 2003 the Federal State Unitary Enterprise "Goszemkadastrsyemka" conducted the separation of valuable lands in all administrative areas, and in 2007 SUE KT "Kuban NI and PI land center" adjusted their location in accordance with the specification of the boundaries of the localities of the region, rural districts and cadastral registration of linear objects of federal and regional roads, forest lanes. At the same time, the order of the head of Krasnodar Territory administration "On approval of the list of lands of particularly valuable productive agricultural lands" was adopted for each separate municipal formation of the region, indicating their list and the total area in a separate district.

Particularly valuable productive agricultural lands in Krasnodar Territory included: garden-suitable, irrigated, tea-suitable, subtropical, hazelnut, nut-suitable, rice, tobacco-suitable, grape-suitable lands, lands with a yield class of more than 80 scores, lands with a cadastral assessment exceeding the average regional level, fallow and unplowed for more than 50 years, as well as lands for agricultural researches and educational institutions. According to the schemes for the location of borders of particularly valuable productive agricultural lands, 53.1 % of agricultural lands in Krasnodar Territory were classified as particularly valuable productive agricultural lands (table 1).

TABLE I. HIGH-VALUE PRODUCTIVE AGRICULTURAL LANDS ON THE AREA OF KRASNODAR TERRITORY

Title of particularly valuable productive agricultural lands	Area	
	ha	%
Agricultural lands including:	4695300	100.0
Garden-suitable	55093	1.2
Tea-suitable	2915	0.06
Subtropical fruit	1551	0.03
Hazelnut-suitable	1027	0.02
Nut-suitable	220	0.005
Rice	65794	1.4
Tobacco-suitable	41304	0.9
Grape-suitable	99738	2.1
Lands with a yield class more than 80 scores	1877145	40
Land with a cadastral valuation exceeding the average regional level	338022	7.2
Fallow lands that has not been plowed for more than 50 years	2209	0.05
Lands for agricultural researches and educational institutions	5900	0.1

After the end of the active phase of the land reform, the issue of the intended use of agricultural lands under perennial

plantings: orchards, vineyards, tea plantations, berry fields, subtropical crops (feijoa, lemon, mandarin) has become more urgent. In the pre-reform period, the efficiency of using these valuable lands was very high. In Krasnodar Territory, horticultural, viticultural and tea-growing state farms were successfully operating, which since the beginning of the implementation of the land reform had become major centers of the country in the field of industrial gardening, tea growing and viticulture.

At the beginning of the land reform, the state was interested in preserving long-term plantations and the lands belonging to tea farms, including those occupied by tea plantations, and were removed from agricultural lands and subject to privatization and distribution among members of labor collectives of farms.

Since the mid-2000s, in order to expand the territories of settlements and use the lands occupied by perennial plantations for housing construction, a period of bankruptcy of previously successful agricultural tea-growing enterprises began. Agricultural lands, previously used in production, finally turned into a commodity and were actively sold by the state to various dubious investment projects [10].

During the preparation for the Winter Olympics in Sochi, the unique state lands of the Imereti lowlands, previously assigned to the Institute of Horticulture and Subtropical cultures, were also used for the construction of Olympic facilities. 927 hectares of lands were no longer used for their intended purpose.

Currently, 199 hectares of the total area of usable lands are in federal ownership, the remaining 1004 hectares of lands are in the municipal property of the resort city Sochi.

The analysis of the use of non-usable lands allows concluding that after the land reform, 50 % of them are actually withdrawn from economic circulation, and another 33 % are not used for their intended purpose. Withdrawn agricultural lands which are in municipal ownership, are gradually being transferred to the category of lands in localities and allocated for individual residential development, construction of hotel-type facilities, infrastructure development for recreation and tourism. More than 400 hectares have already been withdrawn from agricultural turnover, and unique lands have been irrevocably lost for the tea growing industry.

The changes made to the civil legislation in 2007 contributed to the reduction of the area of perennial plantings, to creation of which the state spent large capital investments. In accordance with the Article 130 of the Civil Code of the Russian Federation, long-term plantings were classified as real estate objects that were inextricably linked to land plots. Long-term plantings were recorded on the balance sheet of organizations as fixed assets. After the exclusion of this norm from the Civil Code of the Russian Federation, long-term plantings as independent objects are not put on cadastral registration and not subject to state registration. Public authorities do not keep records of areas occupied by perennial plantings [11].

According to the Ministry of Agriculture of the Russian Federation, grapes are grown in 8 regions of the Russian Federation, among which Krasnodar Territory occupies a leading position. The total area of vineyards in our region on January 1, 2018 is 23.9 thousand hectares, or 29 percent of all the areas of vineyards in Russia, including 21 thousand hectares of fruit – fruiting age.

Figure 1 shows the location of particularly valuable productive viticultural agricultural lands on the example of the resort city Anapa. Viticultural lands are indicated in light green.

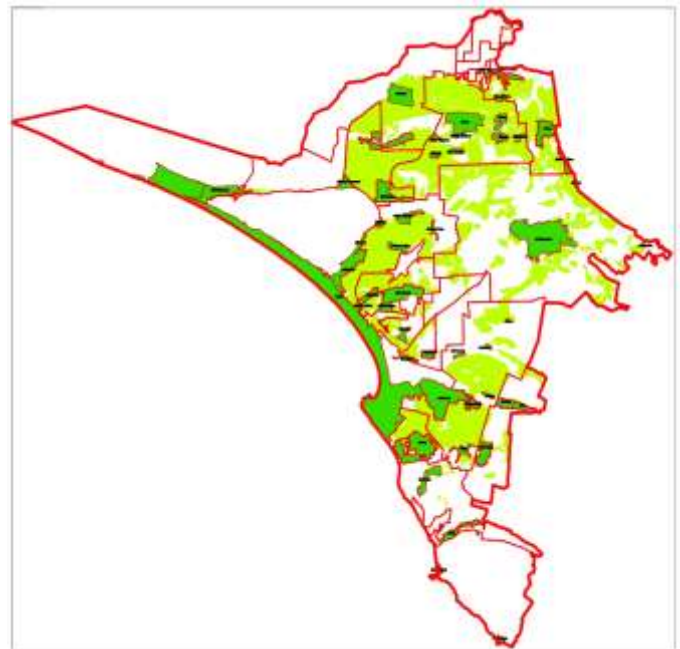


Fig. 1. Diagram of the location of borders of particularly valuable productive viticultural agricultural lands in the resort city Anapa, 2007

Currently, some of these lands have been moved to other categories and have a different type of permitted use. Figure 2 shows the boundaries of particularly valuable productive agricultural lands of Korenovsky district, which are represented by lands with a yield class of more than 80 scores and are shown in orange. The figure shows that almost the entire territory of Korenovsky district is occupied by particularly valuable productive agricultural lands.

When mapping the location of borders of particularly valuable productive agricultural lands in respect to lands with a cadastral valuation exceeding the average regional level was assigned to lands with a cadastral valuation exceeding the average regional level by 20 %. Currently, it is necessary to adjust the boundaries of these lands due to the fact that since the current version of the law, the composition of especially valuable productive agricultural lands includes such lands whose cadastral value exceeds the average cadastral value of agricultural lands in a municipal district (urban district) by more than 5 percent instead of 20 percent.

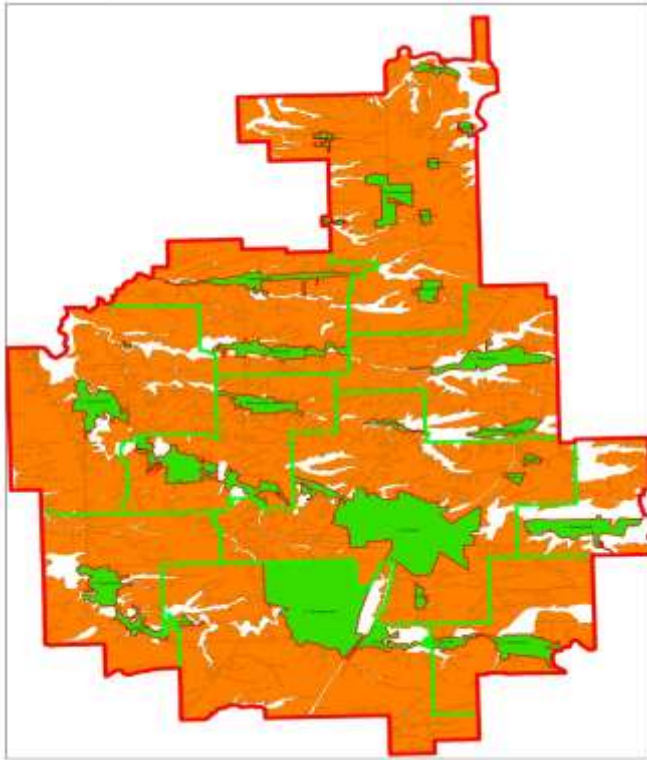


Fig. 2. Diagram of the location of borders of particularly valuable productive agricultural lands in Korenovsky district, 2007

Another round of state cadastral assessment of agricultural lands was completed in Krasnodar Territory in 2015. The cadastral value was determined in accordance with the new guidelines approved by the order of the Ministry of Economic Development of the Russian Federation dated 20.09.2010 N 445. As a result, the average values of specific indicators of cadastral value for all municipalities of Krasnodar Territory increased, and increased in several times in Apsheronsky, Mostovskoy, and Otradnensky districts [4, 5].

Our calculations have shown that today, taking into account adjustments to the legislation of the region and with the new round of assessment of agricultural lands, the area of lands with a cadastral assessment exceeding the average regional level will significantly increase.

Today, the Article 8 of the Land Code of the Russian Federation defines the procedure for transferring land from one category to another that is, changing the purpose of land. It is allowed transferring any land within agricultural land to any other land category. However, the economic value and ecological significance of agricultural land is not always taken into account.

In the near future, Russia plans to abolish the existing division of the Land fund into categories in order to reduce the number of corruption crimes in the construction sector. The abolition of land categories will violate continuity in legislation and will not correct shortcomings in the activities of public authorities. Most experts in the field of land management have a very negative view of the abolition of the division of lands into categories [6–8, 12, 13].

IV. CONCLUSIONS

As a result of the study the following conclusions were made:

- It is necessary to improve the legal and regulatory framework in order to create favorable and specific conditions for the use and protection of particularly valuable productive agricultural lands.
- It is necessary to clarify the boundaries of particularly valuable productive agricultural lands in connection with their transfer to other categories as a result of:
 - 1) changes of the borders of localities;
 - 2) allocation of the part of arable lands to land plots at the expense of land shares;
 - 3) changes in the legislation of the region in relation to lands with a high cadastral valuation (the previously established excess of the average regional level of 20 percent has been reduced to five percent);
 - 4) conducting a new round of cadastral assessment of agricultural lands.
- To increase the efficiency of agricultural lands under perennial plantations, it is necessary to develop and implement a state innovation policy in the fields of tea growing, horticulture, and viticulture, based on economic mechanisms that include:
 - 1) application of stable forms of state regulation and support;
 - 2) development of new and modification of existing technologies for the cultivation of perennial plantations, aimed at ensuring the sustainability of production, resource conservation, biologization and ecologization of production processes.
- It is necessary to enter the boundaries of particularly valuable productive agricultural lands in the Unified State Register of real estate.
- The owners of land plots, land users, landowners and tenants should be assigned special responsibilities for their protection and targeted use of especially valuable lands.
- Develop a system of financing the preparation and implementation of land management projects to establish the boundaries of particularly valuable productive agricultural lands.
- Further researches are needed on the use of particularly valuable productive agricultural lands, as they largely take into account the regional characteristics of Krasnodar Territory, and are unique and require increased attention of scientists, specialists, land users and landowners.

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