

STRATEGIC DIRECTIONS FOR USE OF AGRICULTURAL LANDS



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The rational use and protection of agricultural lands is one of the key conditions for the accelerated growth of agro-industrial complex of the Russian Federation, increase of its stability, efficiency, competitiveness and ecological safety at the modern stage of innovative direction of development of the country's economy. Lands use and condition analysis proved that as of 01.01.2018 more than 50 million ha of agricultural lands were not used, areas of irrigated and drained lands are reduced, out of 11.3 million ha of reclaimed areas 33.3% are in an unsatisfactory condition, 13130.1 thousand ha of unclaimed land shares are abandoned and unrecorded, 1062.5 thousand ha of lands are disturbed, crop rotation on area of 70.65 million ha (89 % of arable lands) is disturbed, agricultural lands continue to be degraded, bushed and overgrown with low forest cover, desertification processes are developed, 60% of agricultural lands are eroded, waterlogged, salt-affected and etc. The urgent necessity arises to define the list of priority strategic challenges, economical, organizational and administrative, legal and other kind of mechanisms, as well as the state activities and instruments ensuring the potentially productive use of agricultural lands. The land administration of the efficient use and protection of agricultural lands is one of the most important mechanisms.

Key words: agricultural lands, efficient use, agro-industrial complex, stability, efficiency, competitiveness

The modern stage of innovative development of the country's economy in terms of import substitution requires accelerated growth of the agro-industrial complex of the Russian Federation, increasing its sustainability, efficiency, competitiveness and environmental safety, which is impossible without the rational use and protection of the country's main wealth – agricultural land.

The problem of rational use and protection of land should be solved on the basis of a reasonable analysis of their condition, quality, trends in the formation and development of agricultural land ownership and land use, existing land legislation, modern use of these lands, their management, etc.

In accordance with the materials of the state statistical accounting of the state and use of land in the Russian Federation as of January 1, 2018, the land Fund amounted to 1 712 519.1 thousand hectares, the country had 383227.7 thousand hectares of agricultural land, including 222012.6 thousand hectares of agricultural land.

Dynamics of distribution of the lands of the Russian Federation on categories and lands of agricultural purpose as a part of the land Fund of the country for 1990-2017 are shown in table 1. These data indicate a steady decline in the area of agricultural land, despite the fact that in 2015 were included areas of agricultural land of the Republic of Crimea. Thus, only in 2001-2015, 595.3 thousand hectares of agricultural land were allocated for non-agricultural needs, including for the construction and expansion of industrial enterprises, transport, energy and other special purpose facilities – 201.0 thousand hectares; for the development of settlements-162.4 thousand hectares; for other needs – 231.9 thousand hectares.

The use of agricultural land area is demonstrated by the data of the 2016 census (table 2). The table shows that in comparison with the data of the 2006 census the total land area of farms of all categories has decreased, the area in agricultural organizations has also decreased, partly due to the increase in the area of peasant (farmer) farms, farms of individual entrepreneurs, country farms. The actual use of agricultural land is 74.0-91.7%. The area of irrigated and drained land has decreased over the decade, in fact, the area that is irrigated (drained) is 36.9% to 62.3%.

Table 1-land Distribution of the Russian Federation by categories¹

№	Land category	Year 1990		Year 1995		Year 2000		Year 2005		Year 2010		Year 2015 ²		Year 2017	
		million ha	%	million ha	%	million ha	%								
1	Agricultural land	639,1	37,4	656,7	38,4	406,0	23,8	401,6	23,5	393,4	23,0	383,7	22,4	383,2	22,4
2	Lands of settlements	7,5	0,5	38,7	2,3	18,7	1,1	19,1	1,1	19,6	1,1	20,3	1,2	20,5	1,2
3	Lands of industry, energy, transport and other special purpose	16,0	0,9	17,6	1,0	17,3	1,0	16,7	1,0	16,8	1,0	17,4	1,0	17,5	1,0
4	Lands of specially protected areas and objects	17,4	1,0	28,8	1,7	32,0	1,9	34,2	2,0	11,6	0,7	47,0	2,8	47,7	2,8
5	Forest Fund lands	895,5	52,4	843,8	49,4	1096,8	64,1	1104,9	64,6	1115,8	65,3	1126,3	65,8	1126,3	65,8
6	Water Fund Lands	4,1	0,2	19,4	1,1	27,8	1,6	27,9	1,6	34,9	2,0	28,1	1,6	28,1	1,6
7	Reserve lands	130,2	7,6	104,8	6,1	111,2	6,5	105,4	6,2	115,8	6,8	89,7	5,2	89,3	5,2
	Total land:	1709,8	100,0	1709,8	100,0	1709,8	100,0	1709,8	100,0	1709,8	100,0	1712,5	100,0	1712,5	100,0

¹ Note: the materials of The state (national) reports "on the state and use of land in the Russian Federation" for the relevant years (1990-2015) were used here and further in the preparation of tables characterizing the use of land. –

M.: State Committee (Rosreestr), 1991-2016.

² Taking into account the Republic of Crimea.

Table 2 - Agricultural land use according to the All-Russian Agricultural Census in 2006 and 2016

Indicators	Units	Land area in farms of all categories			Land area of agricultural organizations			Land area of farms and individual entrepreneurs		
		Year 2006	Year 2016	In % by 2006	Year 2006	Year 2016	In % by 2006	Year 2006	Year 2016	In % by 2006
Total land area	thous. ha	450 599,5	349 151,1	77,5	410 263,7	291 587,8	71,1	29 370,8	43 312,2	147,5
including agricultural land	thous. ha	165 985,0	142 206,7	85,7	132 291,7	90 107,3	68,1	24 143,0	39 576,5	163,9
<i>of which: arable land</i>	thous. ha	102 140,0	94 594,0	92,6	82 224,2	64 861,0	78,9	16 740,1	26 846,0	160,4
<i>hayfields</i>	thous. ha	13 930,2	10 299,0	73,9	10 176,4	5 067,7	49,8	1 123,9	2 227,2	198,2
<i>pastures</i>	thous. ha	35 200,5	26 518,5	75,3	30 201,6	15 202,3	50,3	3 743,7	9 008,3	240,6
<i>perennial plantations</i>	thous. ha	778,2	654,1	84,1	373,1	284,6	76,3	27,6	52,6	190,6
<i>fallow</i>	thous. ha	13 936,1	10 141,1	72,8	9 316,4	4 691,7	50,4	2 507,7	1 442,4	57,5
Of the total area of agricultural land actually used	thous. ha	125 480,3	124 843,3	99,5	97 947,4	80 055,7	81,7	20 094,6	36 271,4	180,5
	%	75,6	87,8		74,0	88,8		83,2	91,7	
Reclaimed land, total	thous. ha	4 780,1	2 889,4	60,4	4 493,6	2 284,7	50,8	286,5	604,7	211,1
<i>among them:</i> - irrigated agricultural land	thous. ha	2 375,1	1 817,3	76,5	2 166,5	1 307,2	60,3	208,6	510,1	244,5
<i>of them actually irrigated</i>	thous. ha	939,2	1 003,0	106,8	810,3	814,9	100,6	129,0	188,1	145,8

	%	39,5	55,2		37,4	62,3		61,8	36,9	
- drained agricultural land	thous. ha	2 405,0	1 072,1	44,6	2 327,1	977,5	42,0	77,9	94,6	121,4
<i>of them with actually existing drainage network</i>	thous. ha	1 100,4	667,2	60,6	1 058,9	607,4	57,4	41,5	59,9	144,3
	%	45,8	62,2		45,5	62,1		53,3	63,3	

The disposal of agricultural land from circulation is also explained by the transfer of these lands to the land redistribution Fund, which for 2016 is 43 608,6,0 thousand hectares, including agricultural land-11 743,9 thousand hectares, arable land - 3 457,4 thousand hectares.

Significant changes have occurred in the area of arable land – the most valuable type of land in the agricultural land, which is characterized by the highest fertility and potential productivity. In 1990-2017, according to Rosreestr, the area of arable land in the Russian Federation decreased by 16.1 million hectares from 132.3 to 116.2 million hectares (by 12.2 %). This was mainly due to the removal of arable land from processing, transfer of low-productive arable land to forage lands, in the fallow, the area of which in the Russian Federation increased from 347.2 thousand to 4896.4 thousand hectares, i.e. by 4.55 million hectares. Arable land in the country is estimated by the results of agrochemical surveys, soil phosphorus, potassium, humus and soil acidity. The dynamics of these indicators in 2009 and 2016 indicates an increase in the area of the surveyed lands, the area of acid soils, soils with low phosphorus content, exchangeable potassium and low humus soils (table 3).

Table 3 - Qualitative characteristics of arable land in the Russian Federation according to the results of monitoring soil fertility (thousand hectares)

Year	Acid soils	Low phosphorus soils	Soils with low content of exchangeable potassium	Low humus soils
2009	29420,93	18193,89	7577,41	25783,61
2016	34883,65	22412,43	8822,63	63889,19

At the moment, there is a large share of unused land, according to various departments, their area ranges from 16.7 million hectares (Rosreestr) to 51.85 million hectares (Ministry of agriculture of Russia), 56 million hectares (data of the Accounts Chamber). The area of unused arable land as of January 1, 2017 in the whole country amounted to 19.4 million hectares-16.8% of its total area. Of the total area of unused arable land, 8.69 million hectares (42.1%) were planted and covered, with signs of waterlogging and flooding, there were 464.8 thousand hectares (2.3 %) (figure 1). In General, the Ministry of agriculture of Russia at the end of 2016 estimated the total area of arable land suitable for involvement in agricultural turnover in 10.5 million hectares³.

³ Report on the state and use of agricultural land in the Russian Federation in 2014. - Moscow: Ministry Of Agriculture Of Russia, 2016. - p. 47.

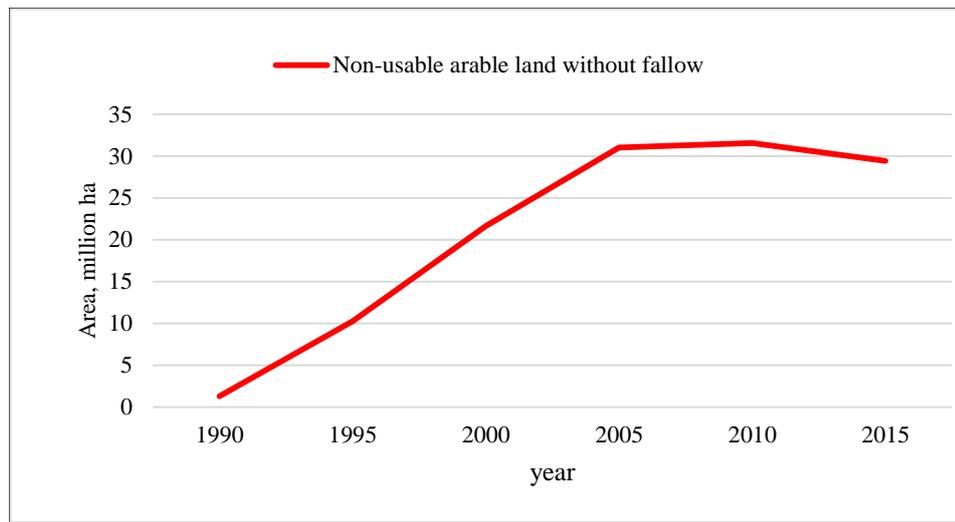


Fig. 1 - Dynamics of the area of unused arable land

A major problem in the use of agricultural land is unclaimed land shares. According to Rosreestr involved in shared ownership is 61839,8 thousand hectares, of them unclaimed in 2017 was 13130,1 thousand hectares (21.2 per cent), 510,3 thousand hectares less than in 2016. The dynamics of unclaimed land shares is shown in table 4.

Table 4-Dynamics of unclaimed land shares

Year	Area of unclaimed land shares (thousand hectares)	Year	Area of unclaimed land shares (thousand hectares)
2005	27 100,0	2012	20 861,3
2006	28 500,0	2013	20 085,7
2007	27 799,9	2014	18 036,3
2008	25 551,6	2015	14 230,4
2009	24 331,2	2016	13 640,4
2010	23 959,9	2017	13 130,1
2011	21750,4		

The presence of unused land is due to the continued cessation of activities of a significant number of agricultural organizations and farms due to the lack of financial, labor and material resources to maintain the arable land in good quality and its processing; the expiration of the right to lease land and its renewal; not the completion of the procedure of liquidation of agricultural organizations and farms, as well as a set of other reasons of economic, natural and social nature.

Simultaneously with the reduction of arable land in the Russian Federation, there has been a decrease in the area of crops, irrigated and drained land and an increase in the area under reclaimed land in poor condition. During 1990-2015, acreage in the country decreased by 38.37 million hectares (figure 2), crop rotations were disrupted on the area of 70.65 million hectares (89 % of arable land).

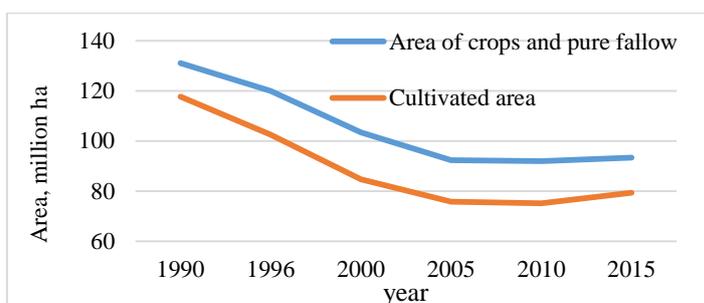


Fig. 2 - Dynamics of the area of crops and pure fallow

As of January 1, 2018, there were 11.3 million hectares of reclaimed land in all land categories, 3.1 million hectares of which were in good condition, 4.5 million hectares in satisfactory condition, 3.7 million hectares (33.0%) were in unsatisfactory condition. The dynamics of reclaimed land is shown in table 5.

Table 5 - Dynamics of reclaimed land (thousand hectares)⁴

Indicators	Irrigated land				Drained land			
	total area	of them in condition			total area	of them in condition		
		good	satisfactory	unsatisfactory		good	satisfactory	unsatisfactory
2005	4553,4	2168,6	1169,9	1214,9	6745,8	928,6	3463,3	2353,9
2006	4512,7	2125,6	1180,7	1172,6	6744,7	947,0	3379,6	2363,9
2007	4434,9	2126,0	1156,4	1119,9	6740,9	970,6	3335,0	2381,1
2008	4346,4	2032,8	1185,5	1121,1	6714,7	982,9	3330,2	2362,4
2009	4305,0	2022,6	1171,2	1111,2	6709,8	950,5	3289,8	2469,5
2010	4283,4	2019,8	1169,2	1094,4	6673,6	868,9	3323,4	2481,3
2011	4285,1	2031,9	1154,8	1098,4	6662,6	853,0	3220,1	2589,5
2012	4285,8	2034,3	1147,7	1103,8	6659,0	862,1	3175,7	2621,2
2013	4265,0	1989,8	1145,8	1129,4	6658,6	859,2	3163,0	2636,4
2014	4260,1	2002,6	1136,1	1121,4	6655,8	930,7	3331,7	2393,4
2015	4655,5	2176,0	1325,6	1153,9	6672,1	881,0	3206,8	2584,3
2016	4659,7	2168,8	1333,9	1157,0	6671,6	857,3	3230,9	2583,4
2017	4658,7	2172,7	1340,8	1145,2	6596,3	893,9	3145,2	2557,2

Table 6 shows the dynamics of the disturbed land area, in the last decade from 2005 to 2007 there was an active increase in the area of disturbed land, in 2008 a lot of work on the reclamation of disturbed land, but since 2009 their area began to increase again.

Table 6 - Dynamics of disturbed lands in the Russian Federation⁵

Year	Area of disturbed land (thous. ha)	Year	Area of disturbed land (thous. ha)
1994	1282,6	2006	1135,0
1995	1139,4	2007	1145,0
1996	1179,6	2008	989,4
1997	no data	2009	995,0

^{4,5} Calculated according to the State (national) report "On the state and use of land in the Russian Federation in 2005-2016". – M.: Rosreestr

Year	Area of disturbed land (thous. ha)	Year	Area of disturbed land (thous. ha)
1998	1186,3	2010	1000,3
1999	1141,6	2011	1013,7
2000	1150,4	2012	1040,8
2001	1150,9	2013	1051,3
2002	1136,3	2014	1057,8
2003	1100,0	2015	1037,0
2004	1117,0	2016	1058,6
2005	1116,7	2017	1062,5

On the basis of the analysis of agricultural land use it is necessary to determine the list of priority strategic objectives, economic, organizational, administrative, legal and other mechanisms, as well as government measures and tools to ensure the long-term use of agricultural land on the principles of rationality and efficiency in the new economic conditions.

Such strategic directions should include:

- institutional and organizational support of agricultural land management;
- legal regulation in the field of land relations in relation to agricultural land;
- improving the powers of the Russian Federation in the field of agricultural land management;
- land management ensuring the rational use and protection of agricultural land;
- improvement of methods of economic stimulation of the organization of rational use of agricultural lands;
- improvement of information support for the rational use of agricultural land;
- improvement of agricultural education and research in the field of rational use of agricultural land.

Special mention should be made of the need for land management to ensure the rational use and protection of agricultural land, which should include:

- completion of differentiation of state ownership of land on Federal, subjects of the Russian Federation, municipalities;
- carrying out the General land surveying of the Russian Federation (to establish and fix on the territory of borders of territories of subjects of the Russian Federation; municipalities (municipal areas, city settlements, city districts, rural settlements, the closed administrative-territorial formations); settlements; territorial zones, zones with special conditions of use of territories, and also parts of the specified territories and zones);
- completion of establishment and consolidation (delimitation and demarcation) of the state border of the Russian Federation;

- systematic (every 5 years) inventory of agricultural land to identify unused, irrationally used or used for other purposes and not in accordance with the permitted use of land, other characteristics of land (by ownership, categories, land, reclamation, etc.) and to implement measures for their redistribution, the organization of rational use and protection in the order of land management;
- renewal of land management works on carrying out soil, geobotanical, agricultural surveys of agricultural lands, assessment of their qualitative characteristics, update the data of the state cadastral evaluation of lands, as well as assessment of the quality of lands that are the native habitat of indigenous peoples of the North, Siberia and the Far East of the Russian Federation;
- carrying out target land management works on inspection and identification of the condition and use of floodplain lands, arid pastures, reclaimed lands;
- development for the purpose of complex planning of sustainable development of rural territories, increase of efficiency of regional and municipal agro-industrial complex of schemes of land management of territories of subjects of the Russian Federation, schemes of land management of municipalities;
- carrying out experimental land management works on zoning of agricultural lands and determination of land use regulations;
- providing drawing up or updating of target schemes of use and protection of agricultural lands in subjects of the Russian Federation and municipalities: schemes of placement of especially protected natural territories; schemes of placement of territories of traditional nature management in places of residence and economic activity of indigenous small-numbered peoples of the North, Siberia and the Far East; General schemes of the organization of the territory of deer pastures; schemes of zoning of territories for placement of gardening, gardening and country non-profit associations of citizens; schemes of anti-erosion actions; schemes of formation of target land funds; schemes of providing with the parcels of land at resettlement of refugees, displaced persons and the military personnel dismissed in a stock from ranks of Armed forces; schemes of placement of the parcels of land intended for housing and social construction;
- updating of data of natural and agricultural zoning of the territory of the Russian Federation;
- zoning of rural (inter-settlement) territories by subjects of the Russian Federation and municipalities on their suitability for use in agriculture and on this basis to develop rules of land use and development of agricultural land, agricultural (land use) regulations, limit (maximum and minimum) sizes of land;

- development of land redistribution and land surveying projects to involve 17.2 million hectares of unclaimed land shares in agricultural use and economic turnover;
- reorganization of the territory of the bankrupt agricultural organizations on the area of 15,9 million hectares which lands are considered in cadastral documents as used by producers of commodity agricultural products while owners of the rights to these lands are excluded from the corresponding registers of legal entities and physical persons;
- implementation of consolidation of land plots of the redistribution Fund on the area of 43.7 million hectares, including 11.9 million hectares of agricultural land, of which 3.5 million hectares of arable land, within the boundaries of municipal districts in order to ensure their effective use by leasing or selling on competitive terms;
- identification, establishment of boundaries, location and area of 24.4 million hectares of agricultural land in other categories of land (excluding agricultural land), and taking measures for their further use for the production of commercial agricultural products or exclusion from agricultural turnover with the development of new land development programs instead of withdrawn;
- implementation of conservation of low-productive and technogenic contaminated agricultural land through the development of appropriate land management projects and organization of their implementation;
- establishment in the order of land management of restrictions and encumbrances in the use of agricultural land, register them and take measures to collect compensation payments in favor of agriculture for the inconvenience of land ownership and land use;
- carrying out intraeconomic land management for the purpose of the organization of rational use of lands of agricultural purpose and their protection, and also the lands used by communities of indigenous small peoples of the North, Siberia and the Far East of the Russian Federation for ensuring their traditional way of life;
- implementation during the on-farm land management performance of the following types of work:
 - a) the organization of rational use by citizens and legal entities of land plots for agricultural production, as well as the organization of territories used by communities of indigenous peoples of the North, Siberia and the Far East of the Russian Federation, to ensure their traditional way of life;
 - b) development of measures to improve agricultural lands, development of new lands, restoration and conservation of lands, recultivation of disturbed lands, protection of lands from erosion, mudflows, flooding, waterlogging, secondary salinization, desiccation, compaction, pol-

lution by production and consumption wastes, radioactive and chemical substances, contamination and other negative impacts;

- provision of land management justification of measures for the conservation and improvement of soil fertility, agroforestry, hydraulic engineering, infrastructure development of agricultural land;

- provision of land management assistance to the farms included in the state programs of development of agriculture, markets of raw materials and food, increase of soil fertility; land reclamation and development, priority national projects for the development of agro-industrial complex;

- improvement of the theoretical basis, methods and technologies of land management, real estate cadastre, land assessment and monitoring.

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