

# **DEVELOPMENT OF AGRICULTURAL LAND MARKET AND AGRICULTURAL LAND TAXATION IN THE RUSSIAN FEDERATION**

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**Key words:** Agricultural Land Market, Agricultural Land Taxation, Russian Federation.

## **SUMMARY**

Development of Agricultural Land Market and Agricultural Land Taxation are unique in Russia as compared to other countries. This is due to the fact that the role of the state has always been and remains dominant in the regulation of land relations in Russia's agriculture. However, before 1917, it was optimally combined with the market mechanism in the sphere of land relations. In the period of 1917-1991 the role of the state in the regulation of the land relations was hypertrophied. The role and importance of market regulators such as the land tax, the rent, the price of the land as well as lease and mortgage were denied both in theory and in practice. Any Agricultural Land Market Transactions were banned.

So only in 2001, the new Land Code was adopted. The Agricultural Land Market Act was introduced in 2003. The State Real Estate Cadastre was introduced in 2009. The Agricultural Land Market Act was amended on December 29, 2010 by the special federal law #435. The right and the order of compulsory withdrawal of the agricultural land plots were settled. The transfer order of municipal agricultural land plots to the property or rent to the agricultural organizations and farmers, their using is simplified.

The Land Taxation Act adopted in 1991 was abolished in 2006 and a new chapter # 31 of the Russian Tax Code "The Land Taxation" was introduced. According to the chapter the Land Taxation is exclusive responsibility of local governments and based on cadastral value of land. According to it the maximum Agricultural Land Tax Rate defines as .3% of "cadastral value" of agricultural land.

In that sense it's very important to make cadastre information more understandable and transparent for customers. It must be pointed out that so called "cadastral value" of agricultural land using in Russia is not applicable for the Agricultural Land Taxation as well as Agricultural Land Market because there is no relation to market land value.

As a result, the Russian banks have not accepted "cadastral value" as a basis for the Agricultural Land Mortgage Transactions. Because of it, outside investors as well as other customers are not being able to get reliable information about the value of agricultural land plots and participate as educated and well-informed market agents in the Agricultural Land Market Transactions. Thus, a new Cadastre Value Methodology as well as Agricultural Land Taxation System based on Market Economy Principles should be developed

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## **INTRODUCTION**

Development of Agricultural Land Market is unique in Russia as compared to other countries. The abolition of serfdom in 1861 and Stolypin's Reform as well as subsequent development of Agricultural Land Market undermined the communal land system. The super goal of modern Russian Agrarian and Land Reform is to create the conditions and incentives to provide sustainable development of agricultural production and to solve the country's food problem. It should be noted that one of the specific objectives of the reform is the redistribution of land from collective to private farming in order to provide rational use and protection of lands in Russia.

The state's land monopoly in Russia was abolished and two main forms of land ownership: public uses and private farming were introduced. Land may be converted into individual private property of citizens for personal use, farming, horticulture, and animal husbandry as well as to accommodate buildings and constructions for individual enterprise, to build and maintain dwelling houses, country cottages, garages. The private property may be established also as the result of the conversion of lands belonged to former collective and state farms as well as joint-stock companies including those established on the basis of state farms and other state-owned enterprises, and lands granted for collective horticultural production, animal husbandry, and collective country-house construction.

The principle of independent agricultural production by land proprietors, landowners, and tenants has been secured. Any interference in their activity by state, economic or other bodies is prohibited. The economic, social, and legal basis for the organization and activity of private farms and coops on the territory of Russia has been determined. The rights of citizens to organize private farms, economic independence, assistance, state protection of their legitimate interests and the right to free cooperation have been guaranteed.

It is proclaimed that a private farm should be an independent economic entity having the rights of a legal subject, which produces, processes, and sells agricultural products. Parcels of land may be leased by the local authorities or citizens who are land proprietors. This was the first time in Russia of a right is available to divide and reform collective and state farmland into shares.

Member of former collective farm or state farm has the right to withdraw and start up a farmstead of his own without asking for consent of collective or the management. Upon decision by the local authorities, such a farmstead is granted a piece of land of a size corresponding to the farmstead member's share in the land stock or value. A withdrawing farmer may expand his land possessions by purchase. During the reorganization of collective and state farms, these farms were broken up into smaller units and their juridical status was made consistent with legislation of the Russian Federation. However, the agricultural land

market in Russia is still not formed, which impedes the formation of a flexible system of land tenure and land use. Prevails in agriculture lease of land shares, and purchase and sale, as well as the agricultural land mortgages are limited.

By its nature, the market of agricultural land represents a market of imperfect competition. This is manifested in the following. The number of sellers and buyers of land plots does not match among themselves. Market information on the transactions is incomplete and non-transparent. Transactions are mostly local in nature. The supply and demand for the land plots are inelastic. In this market there are externalities, such as the state registration of the deals, restrictions on the sale and purchase of agricultural land, which prevent the formation of equilibrium prices of agricultural land plots. There is also inappropriate agricultural land use, pollution, and illegal allotment for commercial needs. The agricultural land is the product of a special kind, the main means of production in agriculture, the cost of which may increase if the normal use for a period of time. The price of the land is determined on the basis of the interaction between market regulators: land rent and interest rate. The amount of rent is determined by fertility and location of the land plot, as well as the additional costs of capital.

## LAND TENURE

The Russian Federation's territory was amounted 1,709.8 million hectares in 2010. Most important piece of the area is agricultural land. The total agricultural land area was estimated 393.4 million hectares in 2010 or 23.0 % of the total Russian Federation area (see Table 1). On a constant area of the territory of the Russian Federation the total area of agricultural land in the country has decreased in 2010 compared to 2009, by 6.6 million hectares, or 1.6%. At the same time for the given period have increased the area of urban land by .5%, industrial land by .6%, forest land by .6%, as well as lands of especially protected territories by .3%, which indicates the strengthening of the allotment of agricultural lands for non-agricultural needs.

**Table 1. Russian Federation Land, 2009-2010, million hectares**

	Item	2009	2010	2010/2009 (+,-)	2010/ 2009, %
1	Agricultural Land	400.0	393.4	-6.6	98.4
2	Urban Land	19.5	19.6	+1	100.5
3	Industrial Land	16.7	16.8	+1	100.6
4	Special Protected Regime Land	34.8	34.9	+1	100.3
5	Forest Land	1,108.5	1,115.8	+7.3	100.6
6	Water Land	28.0	28.0	-	100.0
7	Reserve Land	102.3	101.3	-1.0	99.0
	Total	1,709,8	1,709,8	-	100.00

Source: Rosreestr', 2011

The cropland, perennial, pastures, hay field lands as well as idle land were amounted 196.1 million hectares or 49.8 % of total agricultural land area in 2010 (see Table 2).

**Table 2. Agricultural Land, Russian Federation, 2010, million hectares**

	<b>Item</b>	<b>Area</b>	<b>%</b>
1	Agricultural Land <sup>1</sup>	196.1	49.8
2	Forest Land	30.9	7.9
3	Bush Land	19.3	4.9
4	Road Land	2.3	.6
5	Building Site Land	1.1	.3
6	Water Land	13.2	3.3
7	Marsh Land	25.4	6.5
8	Others	105.1	26.7
	Total	393.4	100.0

Source: Rosreestr', 2011.

**Table 3. Agricultural Land Tenure, Russian Federation, 2010, 1000 hectares**

<b>Item</b>	<b>Total</b>	<b>Cropland</b>	<b>Idle Land</b>	<b>Perennial</b>	<b>Hayfield Land</b>	<b>Pasture</b>
Joint Stock Companies and Partnerships	57,186.6	40,181.2	883.8	183.5	4,254.3	11,683.8
Production Coops	51,032.3	30,602.5	1,225.5	87.4	4,401.9	14,715.0
State and Municipal Enterprises	7,158.5	3,363.8	116.9	38.2	658.7	2,980.9
Research Institutions	1,824.0	1,410.5	19.4	12.4	111.1	270.6
Subsidiary Farms	1,052.2	661.3	22.0	4.3	120.6	244.0
Others	3,748.3	2,282.5	64.6	10.5	255.8	1,134.9
Tribal Land	16.2	.3	-	-	9.2	6.7
Kazak Society Land	92.9	62.8	.1	.1	6.4	23.5
Total	122,111	78,564.9	2,332.3	336.4	9,818.0	31,059.4

Source: Rosreestr', 2011

The dominant role in the Russian Agricultural Land Tenure has played production coops as well as joint stock companies or parastatals (see Table 3). The share of joint-stock companies and partnerships in the total area of agricultural land in 2010 amounted 46.8%, and in the area of arable land - 51.1%. The share of production cooperatives in the total area of agricultural land in 2010, was 41.8%, and in the area of arable land - 39 %. Private farms as well as subsidiary farms have played the important role in the Russian Agricultural Private Land Tenure too (see Table 4). The share of private farms in the total area of the privatized agricultural land in 2010 amounted 32%, and in the area of arable land - 42.5%. The share of unclaimed land shares in the total area of the privatized agricultural land in 2010 amounted 19.4%, and in the area of arable land - 20.1%.

<sup>1</sup> Includes: cropland, perennial, pasture, hay field land as well as idle land

**Table 4. Agricultural Private Land, Russian Federation, 2010, 1000 hectares**

Item	Total	Crop land	Idle Land	Perennial	Hay Field Land	Pasture
Private farms	21,963.9	15,620.9	99.6	15.1	939.1	5,289.2
Individual Entrepreneurs	1,807.4	1,353.5	19.4	6.9	72.7	354.9
Subsidiary Farms	6,957.8	4,931.2	52	214.2	984.4	776
Service Land Farms	56.3	11.8	-	.4	39.1	5.0
Horticulture Farms	1,087.3	30	1.2	1,053	.9	2.2
Vegetable Growing Farms	284.9	283.6	.9	.1	-	.3
Dacha Farms	44.2	34.3	.7	5.0	.8	3.4
Housing	514.7	427.9	.3	63.2	7.1	16.2
Livestock Farms	293.0	37.3	.1	-	64.1	191.5
Grazing Farms	15,211.1	1,245.6	109.3	8.1	3,229.4	10,618.7
Agricultural Land Owners	7,097.7	5,383.6	89.5	12.4	417.6	1,194.6
Land Shares	13,347.3	7,380.6	936.7	10.9	1,494.2	3,524.9
Total	68,665.6	36,740.3	1,309.7	1,389.3	7,249.4	21,976.9

Source: Rosreestr, 2011

In 2001, the Land Code based on market economy principles was adopted by the Russian Parliament (the State Duma). The Agricultural Land Market Act (Zakon ob oborote zemel selskokhzyastvennogo naznacheniya) was introduced in February 2003. According to the Law any parcel of agricultural land may be sold or purchased. As a result the number of Land Market Transactions has been increased (see Table 5).

According to the Rosreestr, the total area of land involved in market relations, increased by 26,281,016 ha in 2010 compared to 2009, from 132,780,473 ha to 159,061,489 ha, or 20 %, and the total number of transactions increased by 437,645 from 4,884,153 to 5,321,798 or by 9 %. It should be noted that, sale and purchase of land by individuals and legal entities in 2010 compared with 2009 increased by 1,547,187 ha from 3,159,634 ha to 4,706,821 ha or 49 %, and the number of transactions for this period of time increased by 397,145 from 520,209 to 917,354 or by 76%.

The number of transactions connected with land mortgage for this time period has increased by 39,822 from 43,921 to 83,743 or by 91 %, and the area of land involved in the land mortgage transactions increased by 883,404 ha in 2010 compared to 2009, from 902,676 ha to 1,786,080 ha, or 98 %. However, the total agricultural land area has been reduced (see Table 6). According to the Rosreestr, the total agricultural land area decreased by .1 million ha in 2010 compared with 2009, from 220.5 million hectares to 220.4 million hectares or by .3%. During this same period, the total area of arable land was reduced by .3 million ha from 121.7 million hectares to 121.4 million hectares or 2.3%.

**Table 5. Land Market Transactions, Russian Federation, 2007-2010, Number of transactions/hectares**

Item	2007		2008		2009		2010	
	Number of transactions/ hectares	%	Number of transactions/ hectares	%	Number of transactions/ Hectares	%	Number of transactions/ hectares	%
Total	4,519,093/ 115,843,859	100.0/ 100.0	4,780,638/ 117,766,738	100.0/ 100.0	4,884,153/ 132,780,473	100.0/ 100.0	5,321,798/ 159,061,489	100.0/ 100.0
including:								
Leasing of state and municipal owned lands	3,628,109/ 114,103,370	80.3/ 98.5	3,677,315/ 114,531,857	76.9/ 97.2	3,514,594/ 113,081,764	72.0/ 85.1	3,403,608/ 138,576,736	64.0/ 87.2
Selling of right to lease of state and municipal owned lands	13,835/ 149,276	.3/ .1	15,684/ 315,889	.3/ .3	22,412/ 326,359	.4/.2	27,153/ 3,044,073	.5/ 1.9
Selling of state and municipal owned lands	233,706/ 369,383	5.2/ .3	292,847/ 503,813	6.1/ .4	350,685/ 610,740	7.1/.5	384,579/ 1,124,684	7.2/ .7
Buying and selling of lands by citizens and legal entities	405,670/ 560,286	9.0/ .5	473,190/ 1,067,303	9.9/ .9	520,209 / 3,159,634	10.8/2.4	917,354/ 4,706,821	17.2/ 2.9
Land Granting	49,715/ 126,596	1.1/ .1	73,334/ 335,042	1.5/ .3	117,776 / 10,582,962	2.4/8.0	159,134/ 4,733,135	3.0/ 3.0
Land Heritage	162,151/ 336,092	3.6/ .3	218,244/ 596,197	4.6/ .5	314,556 / 4,116,338	6.4/3.1	346,227/ 5,089,960	6.5/ 3.2
Land Mortgage	25,907/ 198,856	.5/ .2	30,024/ 416,637	.7/ .4	43,921 / 902,676	.9/.7	83,743/ 1,786,080	1.6/ 1.1

Source: Rosreestr<sup>7</sup>, 2011

**Table 6. Agricultural Land, Russian Federation, 2000-2010, million hectares**

Item	2000	2002	2004	2009	2010	2010/ 2000, %
Agricultural Land- total, including:	221.1	220.9	220.7	220.5	220.4	99.7
Cropland	124.3	123.5	122.1	121.7	121.4	97.7
Pasture	91.0	91.4	92.0	92.0	92.0	101.1
Idle	3.9	4.2	4.8	5.0	5.1	130.8

Source: Rosreestr', 2011

After boom at the first period of reform the number of private farms has been decreased due to severe macroeconomic instability and lack of market infrastructure as well as market economy knowledge.

But the average size of agricultural land occupied by private farm has been increased due to land consolidation. According to the Rosreestr it was estimated 62.2 hectares in 2010(see Table 7). Thus, it increased by 2.3 % compared with 2009 and 10.9% compared with 2006.

**Table 7. Private Farms, Russian Federation, 2006-2010**

Item	2006	2007	2008	2009	2010	2010/ 2006 %
Number of farms, 1000	269.6	267.0	267.0	265.1	261.7	97.1
Total land area, 1000 hectares	15,122.9	15,516.6	15,883.6	16,111.2	16,284.1	97.6
Average land size, hectares	56.1	58.1	59.5	60.8	62.2	110.9

Source: Rosreestr', 2011

## LEGAL FRAMEWORK

The legal framework for Land Market must be also improved. There are some contradictions between basic legal acts (the Constitution of the Russian Federation, the Civil Code, the Land Code, The Federal Mortgage Act, the Agricultural Land Market Act, the Federal State Registration of the Rights to Real Estate Act, and etc.) related to regulation of Agricultural Land Market. Due to it, despite of adoption the Land Code as well as the Agricultural Land Market Act the legal basis for implementation of Agricultural Land Market is still unclear. Both the Russian Constitution, adopted in 1993, and the Civil Code, adopted in 1994, upholds the right to own private property, which includes both land plots and buildings. Despite these guarantees, however, land reform was for a long time the subject of national political debate. The general principles of land ownership are set out in the Constitution. Article 9 of the Constitution establishes the principle of private ownership of land. However, it does not

provide any procedure for the transfer of land, historically owned by the state, into private ownership.

The Land Code approved by the State Duma in 2001 has limited applicability to some categories of land, which are the subject of the separate federal laws. Such land includes water, forestland as well as agricultural land. According to the Land Code, the Agricultural Land Market Act governs the agricultural land market transactions. Thus, in fact, the Land Code applies only to non-agricultural land, which covers about just two percents of the total Russian land area.

In accordance with the Agricultural Land Market Act, the Federal Mortgage Act governs the agricultural land mortgage transactions. The Farm Credit System as well as the Agricultural Land Mortgage Bank must be developed to provide an access for farmers to agricultural credit and to guarantee them the right to use their land as well as other real estate as collateral.

Thus, the Russian Land and Real Estate legislation must be revised to eliminate the substantial contradictions existing between different laws now. Due to it some substantial changes have been made in the Agricultural Land Market Act as well as the Federal Land Use Planning Act on July 18, 2005 by the State Duma. According to them land shares belonged to the former collective and state farmers must be demarcated on the ground as well as their location must be determined. In our opinion it will positively affect on development of Agricultural Land Market in the Russian Federation. But the legislation must be amended to enable Land Market and ensure clear delineation of the corresponding property rights among the various level of the government. In 2001 the Federal Separation the State Ownership on Land Act (Zakon o razgranichenii gosudarstvennoy sobstvennosti na zemlyou) was adopted by the State Duma. According to the Agricultural Land Market Act the Regional Agricultural Land Markets Acts were introduced at the regional level.

In accordance with article 8 of the Land Code The Land Transformation Act (Zakon o perevode zemel i zemelnykh uchastkov iz odnoy kategorii v druguyou) has been adopted on December 21, 2004. According to the Law the land transformation procedure has been introduced and clarified. According to the Law the Forest Code as well as Federal Ecological Expertise Act has been changed.

The first law regulating the payment for land was adopted in 1991. According to the law the land tax, the rent and the normative price of land were introduced. Rates of the land tax were established in accordance with the fertility and location of the land plots. According to the article 21 of the law the rent could be paid both in cash and in kind. According to article 25 of the law the normative price of the land was an indicator characterizing the cost of a plot of a certain quality and location, on the basis of potential income for the estimated payback period. The initial rates of the land tax were determined by the law. The rates of the land tax were adjusted annually according to the inflation rate.

However, the mentioned above act do not conform to the requirements of a market economy. For example, the Law set the task of «leveling of the socio-economic conditions of the economic activity". In addition in accordance with the Law the land rent could not exceed the land tax. The normative price of the land was not related to its market value too.

On January 1, 2006 the Land Taxation Act was abolished and a new chapter # 31 of the Russian Tax Code “Land Taxation” was introduced. According to the chapter the Land



Taxation is exclusive responsibility of local governments. According to the chapter the Land Taxation is exclusive responsibility of local governments. In that sense it's very important to make cadastre information more understandable and transparent for customers. It must be pointed out that so called "cadastral value" of agricultural land using in Russia is not applicable for Agricultural Land Taxation as well as Agricultural Land Market because there is no relation to market land value. As a result, Russian banks have not accepted "cadastral value" as a basis for Agricultural Land Mortgage transactions (see Table 5). Because of it, outside investors as well as other customers are not being able to get reliable information about the value of agricultural land plots and participate as educated and well-informed market agents (buyers or sellers) in Agricultural Land Market transactions. Despite of it, a new Land Taxation System based on so called "cadastral value" was adopted by the Russian Parliament in November, 2004. According to it the maximum Agricultural Land Tax Rate defines as 0.3% of "cadastral value" of agricultural land. But a new Cadastre Value Methodology based on Market Economy principles should be developed.

On July 24, 2007 the State Real Estate Cadastre Act (Zakon o gosudarstvennom kadastre nedvizhimosti) was issued. According to the Law the State Real Estate Cadastre was introduced on March 1, 2009. The Law governs the Real Estate Cadastre Survey Activities as well as collection, processing and usage of the Real Estate Cadastre Information. In accordance with p.2 of article 1 of the Law the State Real Estate Cadastre is a registered record that shows the ownership, boundaries, and values of land and buildings. Such register shows the owner of each parcel of land, its area, its use and category, buildings as well as their fiscal assessment. In accordance with p.5 of article 1 of the Law the land plots, buildings and other property are the subjects of the Real Estate Cadastral Survey.

The Agricultural Land Market Act as well some other land acts were amended on December 29, 2010 by the special federal law #435. The right and the order of compulsory withdrawal of the agricultural land plots were settled. According to the Law it's possible through court in a case when the land isn't used 3 years and more, and also at essential decrease in fertility or considerable deterioration of ecological conditions.

Signs of non-use and criteria of decrease in fertility (ecology deterioration) will be defined by the Government of the Russian Federation. Legal responsibility for non-use of the agricultural land plots is strengthened. A number of amendments is directed on perfection of a turn of the land shares received at privatization of agricultural lands. So, the transfer order (without tendering) of municipal agricultural land plots to the property or rent to the agricultural organizations and farmers, their using is simplified. The price of such land can't exceed 15 %, and a rent - .3 % of its cadastral value. Features of formation of agricultural land plots, execution of transactions with land shares are established. The order of the termination of the rights to unclaimed land shares is settled. As those of what the proprietor hasn't disposed within 3 years (except those, in particular, are considered, the rights on which are registered). Possibility of disclaimer of the property on a land share is provided. The law came into force since July, 1st, 2011, except for separate positions for which other terms of conducting in action are provided.

According to the newspaper "Izvestia" issued on November 11, 2011 at its disposal was the final version of the draft law, which repeals certain categories of lands and recognize as void the federal law "On transfer of lands or land plots from one category to another" ( O perevode zemel ili zemelnykh uchastkov iz odnoy kategorii v druduyou). The bill suggests the change of article 7 of the Land Code, according to which now there are seven categories of land:

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agricultural, industrial, specially protected, forest, water and land reserve. In the new version of the article 7 remains their only three categories of lands: water, forest and protected. In this connection lose the effect of the mentioned above federal law, containing a complex multistage procedure of transfer of land from one category to another. Owner of the land plot shall have the right to choose any type of permitted use of the installed for the given land plot. The project identifies 13 target zones: residential, public, business, agricultural, recreational, cultural heritage objects, special-purpose, industrial, energy, transport, communications, space activities, defense and security, reserve. The number of ways to use for the same territory is not limited.

## **INSTITUTIONAL FRAMEWORK**

The main objective of the Russian Government policy in the area of the Real Estate is to create conditions for efficient use and development of Real Estate Market meeting the requirements of society and individual citizens.

On December 25, 2009 in accordance with the President of the Russian Federation Decree on the Federal Service of State Registration, Cadastre and Mapping the Federal Service of Real Estate Cadastre as well as the Federal Agency of Geodesy and Mapping were dissolved. According to the Decree the Federal Registration Service was renamed into the Federal Service on State Registration, Cadastre and Mapping (Rosreestr).

The functions of mentioned above agencies were transferred to the Rosreestr. The Federal Service on State Registration, Cadastre and Mapping is now under authority of Ministry of Economic Development (Ministerstvo ekonomicheskogo razvitiya) of the Russian Federation. At the regional level local offices of former Federal Service of Real Estate Cadastre as well as Land Cadastre Chambers have been transferred to the Federal Service on State Registration, Cadastre and Mapping.

## **REGIONAL LAND POLICIES**

Development of Agricultural Land Market in the Russian Federation is mostly depended on Regional Land Policies. One of the successful examples is the Orel Region Land Policy which based on legal framework included the Federal Legislation as well as local regulations.

The Orel Oblast Land Legislation is based on the following acts: The Decree of the Head of Administration of the Orel Oblast # 616 issued on December 12, 1997 on farm reorganization and land privatization and the Target Program on development of the Legal Basis of the Orel Oblast Land Reform approved by the regional authorities on October 10, 1998. The Land Policy is the main part of the Orel Regional Government Agricultural Policy included the following components: farm reorganization and land privatization, horizontal and vertical cooperation as well as integration of agricultural producers, development of innovation and investment activities in agriculture, development of the Regional Agricultural Land Market.

The Orel Region agricultural land was amounted 2,032.2 thousand hectares or 82.5 % of total regional land in 2010 (see Table 8). Compared with 2009, in 2010, the area of agricultural land in the region decreased by 3.4%.

**Table 8. Orel Oblast Land, 2009-2010**

Item	2009		2010		2010/ 2009, %
	1000 hectares	%	1000 hectares	%	
Agricultural Land	2,103.1	85.3	2,032.2	82.5	96.6
Urban Land	196.1	8.0	197.5	8.0	100.7
Industrial Land	22.6	.9	23.0	.9	101.8
Special Protected Regime Land	35.5	1.4	35.5	1.4	100.0
Forest Land	100.0	4.1	169.2	6.9	169.2
Water Land	1.2	-	1.2	-	100.0
Reserve Land	6.7	.3	6.6	.3	98.5
Total	2,465.2	100.0	2,465.2	100.0	100.0

Source: Orelreestr<sup>7</sup>, 2011

Break down of the Orel Oblast Land is displayed in Table 9. From table 9 it should be noted that agricultural lands played a major role in the total land area of the region in 2010. The crop land was approximately 63.7% of the total land area in the region in 2010.

**Table 9. Break down of the Orel Oblast Land, 2010, 1000 hectares**

Item	Total	Agri Land	Crop Land	Forest Land	Water Land	Building Site Land	Road Land
Agricultural Land	2,032.2	1,897.1	1,508.5	62.7	12.4	4.9	38.2
Urban Land	197.5	142.9	56.8	10.6	2.6	14.6	22.4
Industrial Land	23.0	2.7	.8	4.8	1.3	2.1	10.8
Special Protected Regime Land	35.5	2.0	.7	32.9	.1	-	.4
Forest Land	169.2	1.7	.2	165.5	.6	.1	.6
Water Land	1.2	-	-	-	1.2	-	-
Reserve Land	6.6	5.1	3.3	.6	-	-	.4
Total	2,465.2	2,051.5	1,570.3	277.1	18.2	21.7	72.8

Source: Orelreestr<sup>7</sup>, 2011

The private land ownership plays the dominant role in the regional agriculture and consists mostly of land shares belonged to former collective and state farmers (see Table 10).

Private land plots accounted 56% of the total land area of the region, while in agriculture the share of private property was 65% of the area of agricultural land in 2010.

**Table 10. Land Tenure, Orel Oblast, 2010, 1000 hectares**

Item	Total	Private ownership	Ownership of legal entities	State and municipal ownership				
				Total	Citizens		Legal entities	
					In use	Lease	In use	Lease
Agri Land	2,032.2	1,321.0	113.3	597.9	-	.3	25.1	7.0
Urban Land	197.5	58.5	1.7	137.3	-	.1	3.8	.9
Industrial Land	23.0	.2	.8	22.0	-	-	8.0	1.2
Special Regime Land	35.5	-	-	35.5	-	-	33.2	-
Forest Land	169.2	-	-	169.2	-	-	-	-
Water Land	1.2	-	-	1.2	-	-	-	-
Reserve Land	6.6	-	-	6.6	-	-	-	-
Total	2,465.2	1,379.7	115.8	969.7	-	.4	70.1	9.1

Source: Orelreestr<sup>7</sup>, 2011

The main role in the Orel Oblast Agricultural Land Tenure plays the joint stock companies and partnerships or parastatals (see Table 11). They occupied 1,231.6 (82.5 %) thousand hectares of the land in 2010. They have also rented most of the agricultural land shares (84.6%).

**Table 11. Agricultural Land Tenure, Orel Oblast, 2010, 1000 hectares**

	Item	Area	Land shares	Including Not claimed land shares	Legal entity's land ownership	State and municipal land ownership
1	Joint stock companies and partnerships	1,231.6	852.8	195.3	49.4	279.2
2	Production coops	196.5	150.0	68.2	-	46.2
3	State and municipal enterprises	6.1	.2	-	-	5.9
4	Research Institutions	27.2	-	-	-	27.2
5	Subsidiary farms	20.6	2.8	.3	2.8	10.9
6	Others	10.7	2.1	-	4.3	4.3
7	Total	1,492.7	1,007.9	263.8	56.5	373.7

Source: Orelreestr<sup>7</sup>, 2011

In 2010 there were 1,246 private farms in the region. The average size of the farm was amounted 146.7 hectares. (See Table 12). The average size of a peasant farm increased in

2010, compared with 2009, by 3.1% due to the agricultural land consolidation on the basis of lease and purchase of the agricultural land plots.

**Table 12. Private Agricultural Land Ownership, Orel Oblast, 1990-2010**

Item	Years	Total Land, 1000 hectares	Including	Including	Total Land, 2010/1990, (+,-) 1000 hectares
			AgriLand, 1000 hectares	Cropland, 1000 Hectares	
Private farms	1990	-	-	-	-
	2010	182.8	182.2	170.8	+182.8
Subsidiary farms	1990	42.0	39.9	33.6	-
	2010	84.9	82.0	74.2	+42.9
Housing	1990	-	-	-	-
	2010	4.4	2.1	1.6	+4.4
Horticulture	1990	3.7	3.7	-	-
	2010	10.0	8.9	.1	+6.3
Vegetable growing	1990	2.7	2.7	2.7	-
	2010	2.6	2.6	2.6	-.1
Grazing	1990	-	-	-	-
	2010	327.5	324.4	142.4	+ 327.5
Total	1990	48.4	46.3	36.3	-
	2010	612.2	602.2	391.7	+563.8

Source: Orelreestr', 2011

As a result of the Orel Oblast Government Land Policy the efficiency of agricultural production as well as a number of agricultural land transactions has been increased in the region (see Table 13).

**Table 13. Land Market Transactions, Orel Oblast, 2010**

Item	Number of transactions/hectares			
	Total	Including		
		Urban Land	Industrial Land	Agri Land
Selling of state and municipal owned lands	2,596/ 2,495	2,435/ 303	114/ 37	38/ 2,143
Selling of lands by citizens and legal entities	14,202/ 100,612	11,344/ 16,812	-	259/ 20,161
Leasing of state and municipal owned lands	6,335/ 171,885	5,206/ 2,240	132/ 468	920/ 167,900
Other transactions, total, Including	5,383/ 12,554	5,324/ 1,784	9/ 165	50/ 10,604
Land Granting	1,763/262	1,763/262	-	-
Land Heritage	3,157/ 1,102	3,157/ 1,102	-	-
Land Mortgage	406/9,141	351/414	8/165	47/8,562
Total	28,516/ 287,546	24,309/ 21,139	255/ 670	1,267/ 200,808

Source: Orelreestr', 2011

The total number of transactions with land plots in Orel Region in 2010 compared with 2009 increased by 16,408 from 12,108 to 28,516 or almost 2.4 times. The area of land involved in market transactions has increased by 106,419 ha over this period from 181,127 ha to 287,546 ha or almost 1.6 times.

The total number of transactions with agricultural land plots in Orel Region in 2010 compared with 2009 increased by 22 from 1,245 to 1,267 or by 1.8%. The area of agricultural land, involved in market transactions has increased by 26,122 over this period from 174,686 ha to 200,808 ha or 15%.

The number of transactions of purchase and sale of the lands of citizens and legal entities in Orel Region in 2010, compared with 2009 increased by 11,797 from 2,405 to 14,202 or almost in 6 times. The number of agricultural land transactions for this period has decreased by 250 from 509 to 259. However, the area of agricultural lands involved in the market turnover increased for this period by 11,662 ha from 8,499 ha to 20,161 ha or 2.4 times.

The number of land mortgage transactions in Orel Region in 2010, compared with 2009 increased by 402 from 4 up to 406 or more than 100 times. The area of land involved in the mortgage transactions for the period increased by 9,104 ha from 36.7 ha to 9,141 ha or in 249 times. The number of agricultural mortgage transactions in Orel Region in 2010 amounted 47. The total area of agricultural lands involved in the mortgage transactions in 2010, was 8,562 ha. It should be noted that in 2009, the agricultural land mortgage transactions were not available in the region at all.

As we mentioned before the main role in the regional Agricultural Land Tenure have played the land shares. Most of the land share owners have been officially registered by the local authorities. The agricultural land has been consolidated by purchase or rent of property rights on land shares belonged to the former collective and state farmers by the private farms, parastatals and the agricultural holding corporations.

However, the agricultural holding corporations have played the dominant role in this process. In Orel Region the agricultural holding corporations mostly just rent land shares belonged to the former collective and state farmers to expand production scale and increase the regional agricultural production efficiency. In that case the land shares owners keep their property rights. In this sense it's very important to determine Agricultural Land Mortgage Value based on Agricultural Land Market Value. The Orel Region Districts Agricultural Land Mortgage Values calculated on the basis of Land Market Auction Price Model are displayed in Table 14. The Land Market Auction Price Model looks like:

$$V_a = [R_0(1+g)(1-t)] / \{[k(1-at)-g] (1+c)+p(1-t)\}; \quad (1)$$

Where:  $V_a$ - Land Market Auction Price, rubles per hectare;  $R_0$ - Land Rent, rubles per hectare;  $g$  - Land Rent Growth, %;  $t$  - Income Tax, %;  $p$  - Land Tax, %;  $K_0$ - Commercial Bank's Interest Rate, %;  $c$  - Transaction Costs, %;  $a$ - Tax Adjustment Coefficient, calculated as  $a=R_0 (1+g)/ [R_0(1+g) +V_1-V_0]$ .  $V_0$  – Cadastral Value of Agricultural Land, rubles per hectare;  $V_1$ - Cadastral Value of Agricultural Land adjusted for the Land Rent Growth, rubles per hectare.

Land Rent value ( $R_0$ ) was calculated on the base of cadastral value of agricultural land treated as  $V_0$  and official interest rate (3%) used for determination of the value. Land Rent Growth was taken in accordance with an official inflation rate estimated 10%. Transaction costs were estimated as 10%. Income Tax was taken as official income tax rate estimated as 20 %. Land Tax was estimated according to official land tax rate .3 % of cadastral land value. Interest Rate was taken as 15 %.

In general, we can treat the Land Market Auction Price as a ratio between Land Rent and Interest Rate adjusted for income as well as land taxation. The ratio between Agricultural Land Market Auction Price and Agricultural Land Mortgage Value was taken as 70 %. In our opinion the value should be accepted both for commercial banks and agricultural producers.

**Table 14. Agricultural Land Auction Prices and Mortgage Values, Orel Oblast, 2009-2010**

Districts	Cadastral Value of Agricultural Land, rub/ha	Land Auction Price , rub/ha	Land Mortgage Value, rub/ha
Bolhovsky	10,091	5,155	3,608
Znamensky	16,244	8,298	5,809
Khotynetsky	12,710	6,493	4,545
Shablykinsky	12,781	6,530	4,571
Soskovsky	5,030	2,570	1,799
Uritsky	12,923	6,602	4,621
Dmitrovsky	7,347	3,753	2,627
Trosnyansky	11,094	5,668	3,968
Kromsky	18,748	9,578	6,705
Orlovsky	27,719	14,161	9,913
Mtsensky	13,282	6,785	4,750
Korsakovsky	31,202	15,940	11,158
Novosilsky	25,054	12,800	8,960
Zalegoshensky	28,177	14,395	10,076
Sverdlovsky	40,779	20,833	14,583
Glazunovsky	31,643	16,166	11,316
Maloarhangelsky	33,977	17,358	12,151
Pokrovsky	40,033	20,452	14,316
Verhovsky	36,442	18,617	13,032
Novoderevenkovsky	32,862	16,788	11,752
Krasnozorensky	42,313	21,617	15,132
Livensky	45,432	23,210	16,247
Kolpnyansky	42,754	21,842	15,289
Dolzhansky	44,366	22,666	15,866
Total:	28,304	14,460	10,122

The Agricultural Land Tax Rates were defined as a 2 % of Agricultural Land Auction Price for the districts of the Orel Oblast (See Table 15). Calculated in this way the rates of the land

tax will contribute to the accumulation of financial resources in local budgets and will be used for the development of social infrastructure in rural areas. These funds can also be used to

increase the fertility of soils, and land reclamation, drainage and irrigation of agricultural lands. Thus, the land tax will perform its two key functions: the fiscal and stimulating. However, the calculated rates of the land tax will be attractive to outside investors, and thus will contribute to attraction of additional financial resources in agricultural production. It should be noted that they will reflect the real market relations, developing in Agricultural Land Market.

**Table 15. Agricultural Land Tax Rates, Orel Oblast (Project)**

<b>Districts</b>	<b>Land Auction Price, rub/ha</b>	<b>Agricultural Land Tax Rates, rub/ha</b>
Bolhovsky	5,155	103.1
Znamensky	8,298	166.0
Khotynetsky	6,493	130.0
Shablykinsky	6,530	131.0
Soskovsky	2,570	51.4
Uritsky	6,602	132.0
Dmitrovsky	3,753	75.1
Trosnyansky	5,668	111.4
Kromsky	9,578	192.0
Orlovsky	14,161	283.2
Mtsensky	6,785	135.7
Korsakovsky	15,940	318.8
Novosilsky	12,800	256.0
Zalogoshensky	14,395	287.9
Sverdlovsky	20,833	416.7
Glazunovsky	16,166	323.3
Maloarhangelsky	17,358	347.2
Pokrovsky	20,452	409.0
Verhovsky	18,617	372.3
Novoderevenkovsky	16,788	335.8
Krasnozorensky	21,617	432.3
Livensky	23,210	464.2
Kolpnyansky	21,842	436.8
Dolzhansky	22,666	453.3
Total:	14,460	289.2

## CONCLUSION

The following measures must be implemented to strengthen the organizational as well as institutional sustainability of Agricultural Land Market in the Russian Federation:

- The Agricultural Land Market Legislation must be revised and improved both at the federal as well as at the regional level.
- The institutional framework for implementation of Agricultural Land Market must be improved both at the federal as well as at the regional level too.



- The Agricultural Land Auctions must be introduced to stimulate development of Agricultural Land Market in the regions of the Russian Federation.
- The training and retraining programs related to the Agricultural Land Market issues must be introduced.
- The Real Estate Cadastre Management should be improved in accordance with market economy standards.
- The public relation campaign to strengthen people's ability to understand the role and importance of the Agricultural Land Market Development must be initiated.
- The Orel Regional Land Policy or the Orel Model is one of successful ways of development of Agricultural Land Market in the Russian Federation.
- The Orel Oblast Agricultural Land Reform experience should be scrutinized and replicated in other Russian regions.
- The Agricultural Land Taxation based on Market Value of Agricultural Land should be introduced in the Russian Federation.

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