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RURAL DEVELOPMENT IN THE LENINGRAD REGION: STRUCTURE AND TENDENCIES

1. General information about the Leningrad region

The Leningrad region was formed in 1927. The administrative centre of the region is St. Petersburg (the city is an autonomous district of the Russian Federation). The area of the region is about 85.9 thousand sq. km (covers 0.5% of the Russian Federation). There are about 1681.7 thousand inhabitants of the region (as of January 1, 1998 – among them: urban – 66%, rural – 34%). There are 29 cities, 38 other urban settlements and more than 3,167 villages located within the territory of the region.

The climate of the region is transitive from marine to continental (average temperature +15°C in July; –7°C in January). The annual quantity of precipitiation can be up to 850 mm.

The Leningrad region is part of the Northwest Economic Region of the Russian Federation.

The region has administrative borders with the Kareliya Republic, Vologda region, Novgorod region, Pskov region, and also state borders with Finland and Estonia.

1.1. Some information about agriculture in the Leningrad region

Agricultural activity in the region is located mainly within the suburban areas and specializes in meat-dairy live-stock farming, poultry farming and crop farming. The basic crops are potatoes, vegetables and fodder cultures (the most profitable cultures are potatoes and vegetables).

The Leningrad region contains 8390.8 thousand hectares. 822.5 thousand hectares are used for the needs of agriculture, including 451.4 thousand hectares of arable land.

The most developed rural areas are located to the southwest, west and northwest of St. Petersburg (they account for about 2/3 of all the area used for agriculture in the region).

2. Structure of agriculture in the Leningrad region

The present state and tendencies of rural development are determined by the alterations which have taken place in Russia and in the Leningrad region during the market reforms.

Much attention in the field of agrarian reform has been paid to creating new institutions of a market economy based on private property (privatisation of land, formation of farms, etc.). The period of radical agricultural reformation in the Leningrad region had basically finished by the beginning of 1995. As a result: 188 enterprises with market based forms of ownership (joint-stock companies, limited liability companies, agricultural cooperative societies, etc.) were formed. Since then, the number of such enterprises has increased up to 216, and the number of state owned enterprises has reduced by 5.

At present, there are 236 agricultural enterprises (20 – state owned, 216 – privately owned), 20 processing enterprises, 24 enterprises in the field of agrarian services, 29 enterprises in the field of veterinary services, 18 state seed inspectorates and 17 other enterprises, servicing the agriculture of the region. There are also some fish-breeding enterprises.

Besides this, there are about 6,911 farms and 194.1 thousand private smallholdings (data from October 1, 2000) in the Leningrad region.

Presently, the average area of farmland per enterprise is 2.5 thousand hectares for agricultural enterprises, 9 hectares for farms and 0.19 hectares for private smallholdings.

3. Changes in the structure of agricultural production

The reforms of agriculture in the Russian Federation were not well-prepared and economically shocked agriculture. One negative consequence of the institutional transformations was a fall in agricultural production, especially in large agricultural enterprises (former state farms), and the resulting alteration in the structure of production volumes in favour of private smallholdings within the region (Table 1).

Table 1. Production structure of agriculture in the Leningrad region, %

Year	Agricultural enterprises	Smallholdings	Farms
1991	75.8	24.0	0.2
1992	63.7	35.8	0.5
1993	65.5	33.7	0.7
1994	61.7	37.0	1.3
1995	53.5	44.9	1.6
1996	47.1	51.3	1.6
1997	43.8	54.4	1.8
1998	51.4	46.7	1.9
1999	51.3	47.1	1.6

Source: Regional Complex Program, 2000.

As a result, the quantity of the goods produced using manual labour, primitive technologies and minimal mechanisation of laborious processes has increased. This structural change, described earlier, was caused mainly by the changes in potato planting (about 77% of potatoes are now planted by smallholders).

However, it should be noticed, that volumes of live-stock farming production from shallholdings are falling: meat and eggs – since 1994, milk – since 1998.

The agricultural enterprises of the region are still the basic producers of grain – 97.6%, eggs – 93.3%, milk – 76.8%, meat – 68.9%, vegetables – 66.7%, and have lost their position only in the area of potato planting – 20.6% (data for 1999).

The quantity of the products produced by farms is not large as a proportion of agricultural production in the region. In 1999 farms produced: grain – 2.4%; potatoes – 2.25%; vegetables – 1.4%; meat – 1.9%; milk – 1.3%; eggs – 0.1% of regional agricultural production.

4. Dynamics of agricultural production

Reforming the system of property ownership (relations) and reorganization of agricultural enterprises were not followed by adequate changes in the state system of agricultural control. During the transformations, a number of functions of state control (management) were lost. A new system of state regulation, necessary under the conditions of a market economy and even more essential during reforms, had not yet been established at a time when the former administrative institutes and norms

were already obsolete. This feature, together with the fall in income of the population and uncontrolled import of food, became the main cause leading to a profound recession in agricultural production, long-term disadvantages and un-profitability of producing most kinds of agricultural products, destruction of the previously existing infrastructure, lack of governmental control and a fall in the level of technology used.

Institutional changes and, above all, changes in the form of ownership, as well as changes in organization and production structures within agriculture, together with a fall in demand from the population, were followed by a rapid decrease in the production volumes of all kinds of agricultural products, except potatoes (Table 2).

Table 2. Gross production of the basic kinds of agricultural production, agricultural enterprises of all categories, thousand tons

Type of production	Yearly Average		
	1986–1990	1991–1995	1996–1999
Grain	68.0	50.6	42.0
Potatoes	592.5	650.7	703.2
Vegetables	363.6	258.0	242.1
Meat (live weight)	254.7	195.8	90.8
Milk	978.1	683.0	515.0
Eggs, mln. units	2056.6	1903.7	1748.0

Source: Federal State Statistic service of the Russian Federation, 2000.

The processing branches of agriculture were exposed to a sharper recession in production volumes of the basic kinds of products, than in the agrarian sector.

The basic cause of this fall in production by the processing industry was a reduction in consumer demand from the population (connected with a fall in the income of the population) and thus a reduction in consumption by the population of key food products, especially livestock farming products.

5. Dynamics of changes in the fertility of agricultural land

One of the most important agricultural problems in the Leningrad region is connected with the maintenance of the fertility of agricultural land (Table 3).

Table 3. Fertilisation of agricultural land (Leningrad region)

	1991	1995	1996	1997	1998	1999	2000
Use of organic fertilizers							
Total, thousand tons	5400.0	1700.0	1924.1	1706.4	1688.6	1607.4	1500.0
Per hectare of land, tons	16.0	5.8	5.1	4.6	4.5	4.7	4.5
Use of mineral fertilizers (calculated according to content of nutritious elements)							
Total, thousand centres	1100.0	170.0	116.6	153.4	181.1	187.8	180.0
Per hectare of land, kg	270.0	36.0	32.0	43.3	51.1	52.5	54.4
Liming of sour soils							
Total, thousand hectares	76.9	1.5	0.6	1.9	2.1	2.2	2.2
Use of lime, thousand tons	349.5	5.8	1.2	7.9	7.4	9.3	9.3

Source: Regional Complex Program, 2000.

As a result, a negative balance of the basic nutritious elements has formed (Table 4).

Table 4. The annual balance of the basic nutritious elements (kg/hectare) in the soils of the Leningrad region

Period	Balance			
	Nitrogen	Phosphorus	Potassium	Calcium
1986–1990	+8.9	+40.3	+49.0	+485.4
1991–1995	–20.5	+2.8	–10.3	–160.6
1995–1999	–20.2	–2.7	–33.0	–362.0
Time remaining before the complete exhaustion of soil (years)	6.4	239	14.8	14.5

Source: Regional Complex Program, 2000.

As we can see (Table 4), if there are no changes in the maintenance of the fertility of agricultural lands, complete exhaustion of many of the most important nutritious elements in the soils of the Leningrad region will take place in 6–15 years.

6. Dynamics of changes in agricultural mechanisation

The technical equipment used in agriculture leaves much to be desired. The rate of purchasing new equipment is insignificant, and old

equipment is breaking down. Above all, this concerns the basis of agricultural mechanisation – tractors and grain combines (Table 5).

Table 5. Dynamics of purchasing tractors and grain combines in the Leningrad region, units

Year	Tractors			Grain combines		
	Quantity, at the beginning of a year	Bought	Failed	Quantity, at the beginning of a year	Bought	Failed
1991	12782	1371	1838	549	18	45
1992	12315	628	1363	521	11	24
1993	11580	170	1364	508	22	29
1994	10386	222	633	501	17	47
1995	9975	155	1324	471	12	61
1996	8806	103	898	422	8	35
1997	8011	94	292	395	18	42
1998	7813	68	1194	371	7	5
1999	6687	470	328	373	20	39

Source: Regional Complex Program, 2000.

By the beginning of 2000 the number of tractors was 53.4% and number of grain combines was 64.5% of the respective numbers from 1991. At the same time, only 18.8% of tractors and 29.4% of grain combines did not exceed their normal term of operation. These data allow us to conclude, that in a few years a mass breakdown of technical equipment could take place, and the farms of the region might remain without mechanized production equipment, if no measures counteracting the present situation are taken. However, it can be seen that in 1999 the number of purchases of technical equipment increased and the number of tractor breakdowns was less than the number of ones bought (for the first time during the years of reforms).

7. The causes of the reduction in production potential

According to the information presented, we can discern some basic causes of the reduction in agricultural production in the Leningrad region:

1. During the term of transition to the market system, large agricultural enterprises could not circulate assets at the same rate and were compelled to make reductions in the volume of agricultural production. One negative consequence of the institutional transformations was the

resulting structural alteration of production volumes in favour of private smallholdings in the region.

As a result: the quantity of the goods produced by manual labour, primitive technologies and the minimal level of mechanisation of laborious processes increased

2. Reforming the system of property ownership (relations) and reorganization of agricultural enterprises were not followed by adequate changes in the state system of agricultural control. During the transformations, a number of functions of state control (management) were lost and a new system of state regulation, necessary under the conditions of a market economy and even more essential during reforms, had not yet been established at a time when the former administrative institutes and norms were already obsolete.

3. One of the basic causes of the fall in production by the processing industry was a reduction in consumer demand from the population (connected with a fall in the income of the population) and thus a reduction in consumption by the population of key food products, especially livestock produce.

4. The uncontrolled import of food has led to a profound recession in agricultural production too.

In my opinion, these are the basic causes, which have lead to a profound recession in agricultural production, long-term disadvantages and un-profitability of producing most kinds of agricultural products, destruction of the previously existing infrastructure, lack of governmental control, a fall in the level of technology used and exhaustion of important, nutritious elements in the soil of the Leningrad region.

8. Latest trends – improvement in the economic situation of agriculture

Since 1990 all the attempts to stop the process of falling production potential have failed. During the first years of reforms, the accumulated agricultural potential restrained this process. But in 1994–1997 a rapid fall in production began. Under the conditions of limited financial resources held by agricultural enterprises, as well as by regional and federal budgets, the main goal of the agrarian policy of the Leningrad region became conservation of agricultural potential. But suddenly the crisis of 1998 helped (although this may seem strange).

Since 1998 (after the crisis) the demand for domestic production has increased. The conditions for regional agricultural production became

advantageous. Since that time, agricultural production has, in general, increased (Table 6).

Table 6. Gross production of basic types of agricultural produce, agricultural enterprises of all categories, thousand tons

Type of production	On average per year			
	1986–1990	1991–1995	1996–1999	2000
Grain	68.0	50.6	42.0	52.4
Potatoes	592.5	650.7	703.2	642.0
Vegetables	363.6	258.0	242.1	264.6
Meat (live weight)	254.7	195.8	90.8	103.7
Milk	978.1	683.0	515.0	609.2
Eggs, mln. units	2056.6	1903.7	1748.0	2000

Source: Regional Complex Program, 2000.

However, it is necessary to note, that this trend of a general improvement in the economic situation in agriculture, starting in 1998–1999, was caused, as I have already stated, by the August crisis of 1998, the extremely rapid rise in the price of imported food and thus a reduction in imports, etc. but a lot of economic and political problems still exist.

So we can only speak about the presence of objective preconditions for the further development of agriculture in the Leningrad region, if the economic conditions favourable to rural development are preserved.

9. Conclusion

Despite all the mentioned problems, agricultural production in the Leningrad region is presently one of most dynamically developing agro-industrial sectors in the Russian Federation.

However, in spite of all the positive changes which have taken place in agriculture in the Leningrad region since 1998 and the increase in productivity within agriculture, the state agro-industrial sector in the region is far from being stable (and very far from being sustainable). The level of genetic potential in plant farming and live-stock farming cannot sustain high productivity in agriculture in the region for a long time while there is lack of financial means, poor technical equipment, exhaustion of important nutritious elements in the soil etc.

The future of rural development in the region depends not only on the level of knowledge and technologies, but also on the skills of the people,

who apply them. The only thing we can speak about is the presence of objective preconditions for the further development of agriculture in the region, that could finally lead to highly-productive, sustainable agriculture in the Leningrad region in the future.

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