Recent Development in Russian Agro-Food Sector and its Further Policies

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Introduction

Russian economy has experienced many changes since the economic reform started in the beginning of the 90-s. The price liberalisation launched in 1992 diminished the role of central planning in the allocation of inputs and outputs in favour of the role of market prices. The reform of the agricultural sector has resulted in a widely spread privatisation. Markets were liberalised relatively fast; at least those for commodities and services as well as the labour market. This meant the planning system was largely dismantled, state procurement abolished and production and consumption decisions were to be guided by the market. Also government intervention via subsidies or other instruments were greatly reduced. Low production and financial performance of agricultural enterprises have expressed in production decline (over 40% between 1991-1998) and a large proportion (84,4% in 1998 and 60% in 1999) of the unprofitable agricultural enterprises (Goskomstat, 2000). The restructuring process in the country created uncertainties for farmers and resulted in fragmentation of farms or farm ownership. Compounding the problem was the shortage of technical and business management skills for successful private farming that had been absent under the previous system. Previous linkages between farms and the up- and downstream industries broke down. The whole set of problems was worsened by the lack of agricultural finance and credit (Trzeciak-Duval, 1999). A lack of finance is caused by internal and external reasons. The farms are lacking its own revenue due to high production costs and price disparity between agricultural and other sectors of economy. Yet the possibilities to obtain the credit sources are rather limited due to farm's inefficiency, low profitability so they cannot meet the high bank requirements. Agricultural production declines for various reasons and results in several outcomes. One of the outcomes of the production decline is sharp reduction in food consumption. This paper presents the description of the current situation in the producer and consumer side and points their interrelations. The major problems of the Russian agro-food sector are listed. Also the key subjects of the Agenda for agricultural development of Russia in 2001-2010 in respect to production and consumption strategies, information service are presented. We describe the objectives and existing strategies of the Federal Training Centre located in Moscow Timiryazev Agricultural Academy as an example of promoting the information service in agriculture, which in our view serves the solutions to overcome the production difficulties. The paper finalises with conclusions and discussion.

Current state of agricultural production

The topical problem of agricultural production decline in transitional economies has drawn attention of agrarian economists in Eastern European countries. Gow & Swinnen (1998), Macours & Swinnen (1999) admit that one of the essential reasons for output decline is the financing problem due to reduced supply of agricultural credit, market uncertainty and high inflation. According to the survey conducted by Goskomstat in 1998, 78% of Russian agricultural enterprises reported a lack of finance as the most significant limiting factor of agrarian development was; 55% mentioned high interest rates; 48% underlined consumers' insolvency (Goskomstat, 2000). Also the respondents mentioned insufficient support from the

state, critical condition of the fixed assets, high taxes and inefficient management. The lack of external financing limits the production possibilities of the agricultural enterprises.
The initial pre-reform conditions in Russia were as follows: pre-transition agriculture was characterised by the dominance of large–scale farms. Land was nationalised in Russia during the Communist era. Prior to 1992, agricultural producers were granted subsidies and compensations significantly. According to Goskomstat (2000), the average share of government annual subsidies in the total cash receipts in agriculture in 1996-1998 is still greater (5.5%) then the average share of subsidies for all sectors (3.5%). In the Moscow Region, for example, in 1997 the level of granted subsidies reached 400.6 million rubles that is about 12.5 % in gross revenue. Agricultural production is likely sensitive to the level of subsidies. The major part of subsidies for agricultural production in the Moscow Region in the years 1997-1998 was granted for livestock production: 80% of gross subsidies in 1997 and 84.7% in 1998 [Kuleshov [eds.], 2000].
Regardless of its relative size in the overall economy, agriculture is a highly visible activity in Russia, given its importance in meeting basic needs. The share of agriculture, forestry and agricultural service institutions in the GDP of transition economy in 1990 was 16.6% (16.5% just for agriculture), whereas to the year 1999 it has declined to 6.9% (6.6% for agriculture. Overall, the GDP in Russia declined by 40% during the period 1990-1999 (Table 1).

Table 1. Real GDP in Russia, in million rubles of 1990

Economic activity	1990	1991	1995	1996	1997	1998	1999
Industry	228.1	228.7	100.2	100.0	102.4	102.0	117.5
Agriculture, forestry, agricultural service	99.6	74.1	21.9	25.1	24.2	12.7	25.4
Construction	57.3	50.0	26.0	29.0	28.7	15.1	21.7
Transport, communication	60.0	38.0	36.0	42.1	45.7	24.0	37.2
Trade	33.6	63.0	59.6	62.1	63.7	42.5	80.8
Science, healthcare, social security, education, culture	65.3	45.8	23.0	28.7	32.9	17.0	26.9
Other	55.7	45.0	47.4	54.5	65.0	38.3	57.6
GDP	599.6	518.2	302.5	343.3	363.4	211.1	367.1

Real growth rate in agriculture in 1990-1991 was minus 25.6%. Before the financial crisis hit in 1998, Russia's agricultural sector had begun a discernible process of adaptation to overall social and economic reforms. Supply response became positively correlated with changes in relative prices (Serova *et al* 1999). In 1996, agricultural sector showed some moderate growth, however in 1998, due to the crisis and adverse climatic conditions, agricultural output declined by a half.
A different picture is conveyed by agriculture's share in total employment: the change in the number of persons employed in the agricultural sector is not as steep as for the share of GDP (Trzeciak-Duval, 1999). The disparity between a declining share of agriculture in GDP, on the one hand, with a steady employment share, on the other, could point to significant declines in labour productivity. As mentioned in (Trzeciak-Duval, 1999), the countries with the strongest support under the previous regime experienced the strongest declines in production and consumption after price liberation and cuts in subsidies.
The reduction of agricultural production in Russia was continuos, but not particularly sharp. The overall trend marks the difference between sectors: production by large-scale enterprises declined severely by more than half between 1990 and 1997, but that was compensated in part by 19% increase of output from household plots (Trzeciak-Duval, 1999).

Structural changes in the property rights have led to a strong naturalisation of agriculture and diminishing the share of marketable production at the large-scale agricultural enterprises.

Table 2. Gross output by categories of producer, thousand ton

Output	Category of producers	1992	1995	1996	1997	1998	1999
Grain	large-scale enterprises	100400	55500	59800	74500	41900	47800
	subsistence plots						
	family farms	2232	3001	3222	5493	3238	3874
Sugar beet	large-scale enterprises	24600	16900	14200	12100	10000	13900
	subsistence plots						
	family farms	512	669	539	484	433	830
Sunflower	large-scale enterprises	2800	3400	2200	2300	2500	3300
	subsistence plots						
	family farms	180	519	315	307	327	524
Potatoes	large-scale enterprises	7600	3300	3000	2400	2200	2000
	subsistence plots	29900	35900	34900	33800	28700	28800
	family farms	307	363	357	353	304	316
Vegetables	large-scale enterprises	4200	2600	2200	2200	1800	2400
	subsistence plots	5500	8300	8200	8500	8400	9500
	family farms	78	148	116	164	188	256
Meat	large-scale enterprises	4900	2700	2300	1900	1900	1600
	subsistence plots	2900	2800	2800	2700	2700	2600
	family farms	56	88	88	78	76	74
Milk	large-scale enterprises	30900	21600	18400	16900	16700	15800
	subsistence plots	14800	16300	16300	16100	16000	16000
	family farms	248	576	525	527	547	558
Eggs, mln Pieces	large-scale enterprises	31200	23000	21400	21900	22700	23200
	subsistence plots	11200	10200	9900	9800	9900	9800
	family farms	24	129	119	119	120	125
Wool, ton	large-scale enterprises	118	53	40	27	19	15
	subsistence plots						
	family farms	1427	4226	3298	2660	2416	2220

However, just as in the pre-reform period, the agricultural enterprises remain the main producers of agricultural products. They produce the main shares of the grain, sugar beet, sunflower (see Table 2). However, in the grain production during 1992-1999 the share of the private family farms grew by 5.3%, in sugar beet production – by 3.6%, in sunflower production – by 7.7%. Potatoes and vegetables are mainly produced by the private households on subsistence plots and *dachas*. This group of producers has decreased potato production from 29900 to 28800 tons, however, its share has increased by 13.5%. With respect to vegetable production, its absolute production by the enterprises decreased almost by a half, although its significance had grown from 56.2 to 78.2%. Among the crop production, in absolute values only the production of sugar beet by family farms, of vegetables by household plots and family farms has grown; production by other sectors of other products decreased gradually. According to the RF State Statistical Committee, in 1999 gross grain harvest was 51.7 million ton in the weight after treatment and cleaning. In the course of 1992-1999 the gross grain output has declined by a half (Table 2) that was stipulated by decrease of the sown area under this crop (see Table 3) and by lower grain productivity (Table 4). Only gross harvest of sunflower grew up by 28.3% that happened due to expansion of the sown area because the productivity of this crop was diminishing.

Table 3. Agricultural area in Russia, million hectares

	1985	1992	1995	1996	1997	1998	1999
Agricultural area	218.4	210.6	209.6	208.4	206.2	195.2	197.6
Arable area	133.9	130	127.6	126	124.5	121.6	120.9
Pastures	83	78.3	78.6	78.8	77.6	69.7	72.6
Total sown area	119.1	114.6	102.5	99.6	96.6	91.7	88.3
Including grain crops	68.1	61.9	54.7	53.4	53.6	50.7	46.6
Sunflower	2.3	2.9	4.1	3.9	3.6	4.2	5.6
Sugar beet	1.5	1.4	1.1	1.1	0.9	0.8	0.9
Long-stalked flax	0.6	0.3	0.2	0.2	0.1	0.1	0.1
Potatoes	3.6	3.4	3.4	3.4	3.4	3.3	3.3
Vegetables	0.7	0.7	0.8	0.7	0.8	0.7	0.8
Fodder crops	40.8	42.5	37.1	35.9	33.3	30.9	30.0

The total agricultural land during the period 1985-1999 reduced by 20.8 million hectares (9.5%), from that amount arable area decreased by 13 million hectares (see Table 3). Total sown area reduced more gradually by 30.8 million hectares or by a quarter of its territory in 1985. As a result, the certain shifts took place in the area under crops. During the period 1992-1999 the sown area under all main crops was reduced, except for sunflower (increased by 3.3 million hectares that accounts 93.1%) and vegetables (increased by 14% from 0.7 to 0.8 million hectares). The major area reduction affected the crop of the flax that decline accounts for more than 65%. The crops of the sugar beet, grain, fodder crops declined by 35, 25 and 30 % respectively. The structure of the crops during 1992-1999 has changes only slightly. As before, the grain (55%) takes the main share, then fodder crops (35%) and then sunflower (5%), potatoes (3.5%) and other crops follow.

Table 4. Average yields in crop production dt/ha

	1992	1995	1996	1997	1998	1999
Winter grain	26.5	18	19.3	24.1	18.3	22.3
Spring grain	13.9	11.7	13.1	15.3	10.8	11.8
Sunflower	11.6	10.6	8.1	8.6	8.4	8.3
Potatoes	114	118	114	111	97	97
Vegetables	145	148	145	147	141	149
Fodder beet	212	239	203	232	205	206
Maize for green	161	149	121	148	124	127
Perennial grass (hey)	19.6	16.2	15.1	15.8	12.3	12.9

Animal husbandry production remained accumulated at the large-scale enterprises in 1992 and accounted about 65% for meat and milk and 74% for eggs (see Table 2). To the year 1999 the situation has changed and the share of production by private household became much larger: for meat it has increased by 24%, for milk by 17.2% and for eggs by 3.2%. Livestock production also declined during the analysing period and both lowering productivity and declining number of livestock affected this outcome. On average milk productivity, for example, was constantly declining and from 2731 kg in 1990 it resulted in 2432 kg in 1999. Analysing the structure of the livestock (see Table 5), one can notice that the slower reduction in absolute value of it in the subsistence households compared with agrarian enterprises during several years resulted in the grown share of the livestock in households.

Table 5. Number of animals in all categories of farms, mln of heads at the beginning of a year

1991	1992	1993	1994	1995	1996	1997	1998	1999	2000

Livestock	57	54.7	52.2	48.9	43.3	39.7	35.1	31.5	28.5	28
Cows	20.5	20.6	20.2	19.8	18.4	17.4	15.9	14.5	13.5	13.1
Pigs	38.3	35.4	31.5	28.6	24.9	22.6	19.1	17.3	17.2	18.3
Sheep	58.2	55.3	51.4	43.7	34.5	28	22.8	18.8	15.6	14.8

Number of livestock has gradually reduced in agricultural sector (Table 5); especially it is noticeable for agricultural enterprises. Number of livestock in the sector declined by 50% (57% in agricultural enterprises), cows by 36% (50% for agricultural enterprises), pigs by 59% and sheep by 84%. The commonly observed reason for reduction in heads of animals is a lack of resources (fodder) to keep them.

As it was mentioned before, the production by family farms did not overcome its aggravating conditions and to the year 1999 this sector of economy did not exceed 1-13% of total agricultural production.

At the end of the analysing period, both crop and livestock production take about 50% in agricultural production. The share of these branches has shifted in favour of crop production. Livestock production has experienced a greater decline during 1991-1999 (40%) than crop production (15%).

According to the official data, the share of the profitless agricultural enterprises to the year 1999 was 60% (89% in the previous year). Only the sale of grain, sunflower, vegetables, potato and eggs stays profitable during 1992-1999. Under such circumstances the inflow of imported goods and products increased (see some of the products in Table 6). In Russia, agro-food imports have ranged between 22 and 28 percent of total imports in 1991-1996 (Trzeciak-Duval, 1999).

Table 6. Import and export of agricultural products, in thousand ton

Products	Export				Import			
	1996	1997	1998	1999	1996	1997	1998	1999
Meat	1.2	12.6	5.8	0.0	545	705	595	805
Poultry	0.5	2.5	0.5	0.1	752	1145	814	235
Fish	1154	1022	838	891	351	488	339	288
Milk	36.5	18.6	14.2	7.1	21.5	77.8	117	165
Butter	0.2	2.8	0.3	0.0	84.6	166	73.7	28.6
Potato	1.2	0.5	1.0	0.5	58.0	117	137	200
Cereals	449	1603	1455	411	1171	924	447	4531

Agro-food imports by Russia have traditionally accounted for a high percentage of total imports, while the share of agro-food exports has been of minor relevance (Eiteljorge & Hartmann, 2000). Despite the price increase for domestic food products, they are still relatively lower of those for imported and exported products (Korotkov & Birukov, 2000).

Consumption of main food products

In terms of production and consumption trends, overall it can be observed that the countries with the strongest support under the previous system (e.g. Russia) experienced the strongest decline in production and consumption after price liberalisation and cuts in subsidies (Trzeciak-Duval, 1999). The overall reduction of food production in Russia has lead to decline in food consumption, the major issue is not so much the average level of consumption, but rather its composition in terms of quality and nutrition content, which are closely linked to the income differentiation that has developed in Russia. The trends in food consumption are presented in this section.

Food consumption in Russia developed under the strong pressure of party ideology. One of the main slogans of the Soviet regime was 'cheap bulk foodstuff for the Soviet society'. Therefore food prices remained unchanged for decades, while income of population was growing. This paradigm led to tremendous growth in subsidies, both for consumers and producers. For some products consumer subsidies reached 80%. In 1989, food subsidies to consumers alone made up one third of the Russian Federation's budget (Serova, 2000).
As a result of reforms and Russian financial crisis of 1998, real income of population fall gradually (Table 7).

Table 7. Real monthly income per capita, in thousand rubles of prices 1994

Region	1994	1995	1996	1997	1998	1999
Russian Federation	206.3	224.1	271.3	299.1	169.1	205.5
Central Zone	141.5	147.9	187.0	191.3	102.1	112.4
Moscow Region	186.6	171.9	184.1	231.7	150.2	186.3
Moscow City	691.1	784.3	1015.9	1130.8	712.1	876.3
Ural Zone	140.0	141.1	178.0	201.3	121.1	159.3
Far East Zone	411.3	416.0	530.4	559.7	307.3	362.9
North Zone	266.4	292.5	328.9	329.0	181.1	211.4
North-Caucasus Zone	129.4	144.3	186.4	210.8	125.5	156.1

Monthly income of the population in real terms in Russian Federation varies from 206.3 thousand rubles per capita in prices of 1994 to 169.1 in 1998 and then grown up to 205.5. The situation is different among the regions of Russia (see some of them in Table 7), but in all regions there is a strong decline of real income in absolute value. Moreover inequality in the population has risen considerably: the Gini coefficient, which was 0.260 in 1991 reached 0.394 in 1999, according to official statistic.
Decline in disposable household incomes and reduction of consumer subsidy has led to moderating food price increases (Table 10) and to declining in purchasing ability of income.

Table 8. Purchasing ability of monthly personal income (kilograms per month)

Food products	1990	1995	1996	1997	1998	1999	1990/1999, %
Fish	204,8	71,8	78,4	87,4	75,4	60,6	-70%
Milk	716,7	234,7	257,4	307,4	294	258	-64%
Bread	551,3	190,4	171	194,9	202,8	206,1	-63%
Oil	125,7	62	83	106,4	69,6	59,1	-53%
Beef	68	48,5	56,5	47,4	40,7	33,1	-51%
Potato	500	291,7	373,7	475,4	424,5	276	-45%
Sugar	238,9	136,1	193,5	221,1	159,8	153,2	-36%
Eggs, pieces	1955	1318	1391	1596	1434	1312	-33%

So that, for example, in 1990 monthly income allowed to purchase 204.8 kg of fish (see Table 8), in 1999 this level reduced to 60.6 kg. Thus, purchasing ability of income measured as goods equivalent of monthly personal income had decreased by 1999 comparing with 1990. The biggest reduction of 70%, 64%, and 63% was noticed for fish, milk and bread respectively.

Income decline, food prices increase, aggravating of purchasing ability, income inequality have led to cuts in food consumption (Table 8). Consumption of almost all food products reduced significantly during 1990-1999. The greatest reduction (25%-51%) was observed in consumption of protein products (meat, fish, milk and eggs). On the other hand, the intake of bread remained almost unchanged during 1990-1999 and consumption of potato increased from already high level in 1990 by another 10% during the same time period.

Table 8. Consumption of main food products, kg

Food products	1990	1995	1996	1997	1998	1999
Meat	75	55	51	50	48	45
Milk	386	253	232	229	221	215
Fish	20	9.4	9.4	9.3	9.8	9.9
Eggs, pieces	297	214	207	210	218	222
Sugar	47	32	33	33	33	35
Oil	10.2	7.4	7.9	8.4	8.9	9.3
Potato	106	124	125	130	123	117
Vegetables	89	76	75	79	78	83
Fruits	35	29	31	33	31	28
Bread	119	121	117	118	118	119

Therefore consumption of most, especially of protein products in Russia, in 1999 was considerably lower than normative sufficient level and than those in the Netherlands in 1994 (Table 9).

Table 9. Consumption of food products and normative sufficient level, per capita, per year, kilograms

Food products	Russia		The Netherlands, 1994	1999 in % to	
	1999	Normative sufficient level		Normative sufficient level	The Netherlands, 1994
Meat	45	84	86	54	52
Milk	215	360	264	60	81
Fish	9,9	20	11,2	50	88
Eggs, pieces	222	280	173	79	128
Sugar	35	38	38	92	92
Oil	9,3	13	29,2	72	32
Potato	117	105	84	111	139
Vegetables	83	146	119	57	70
Bread	119	112	59	106	202

On the other hand intake of potato and bread was higher than normative sufficient level and considerably higher than consumption in the Netherlands in 1994. Comparison of food intake in Russia with consumption in the Netherlands was made because of similar climate condition, suitable for production of the same food products. In addition, Dutch people most likely do not face any income constraints, therefore their consumption level has nearly reached its highest level. Contrarily, there are significant income constrains in Russia. As it was mentioned earlier, there were large income differences across Russian regions, but even in Moscow - the region with the highest income in 1999 consumption - of protein products was still considerably lower than normative sufficient level (Centre for economic conjuncture, 2000).

Main problems of agro-food sector in Russia

Before discussing the main strategies of the Russian government towards improvement of agricultural production and food consumption in 2001-2010, we would like to point the main problems of agro-food sector, discussed in (Gordeev, 2001).
Agro-food sector is not isolated from remaining economy and unconditionally collides with the same problems, as other sectors: financial instability, absence of the legislative warranties of the property rights and fulfilment of the contracts, low level of management, etc.
Nevertheless there are specific sector problems (Gordeev, 2001).

1. The main problem of a sector is a limited demand for agricultural production. The liberalisation of prices in 1992 has resulted in cancellation of the state food grants, which reached 80 % of retail prices on some base products. It sharply has reduced a buying power of the population. The backwardness of a market infrastructure has interrupted normal links between the producer, manufacturer and consumer. The backlog demand was covered with import. The demand for domestic agricultural production has been reducing all years of the reforms due to dropping of actual incomes of the greater part of the population.
2. Other major problem today is a difficult financial position of agriculture. Price liberalisation in the beginning of economic reforms in country has resulted in so-called price disparity between the prices of industrial and agricultural sectors (see Table 7).

Table 10. Price indices change in industrial and agricultural sectors

Index	1991	1992	1993	1994	1995	1996	1997	1998	1999
Consumer price index	2.6	26.1	9.4	3.2	2.3	1.218	1.110	1.844	1.365
Price index for industrial products	3.4	33.8	10	3.3	2.7	1.256	1.075	1.232	1.673
Price index for agricultural products	1.6	9.4	8.1	3	3.3	1.435	1.091	1.419	1.914

The main components of financial problem in agriculture are as follows:

- Small revenues from sales of production by virtue of reduction of production.
- Shortage of own means for seasonal financing of production and inaccessibility of the bank credit. Prevalence of commodity forms of credit (state and private) and barter transactions.
- High credit dependency of the sector. The main body of the enterprises has the blocked bank accounts that stipulates the unmonetary transactions and decreases farm profitability.
- High level of debts to the budget and non-budget funds. The main share of these debts is wages to the employees.
- The existing system of taxation does not take into account a seasonal nature of production and financial resources in agriculture.

3. There are no well functioning institutions and mechanisms of efficient transfer of national properties to individuals. Therefore significant value of land and fixed assets are without any use and terminating the normal operation.
4. The agriculture suffers due to significant underinvestment. The purchase of engineering and equipment were reduced by several times during the reform period.

5. There is backwardness of agro-food markets resulting in interregional trade barriers, unformed market infrastructure, control of prices on 'social' products (bread, butter, sugar, meat, etc.).
6. Absence of the qualified managers possessing experience activity under market circumstances.
7. The social infrastructure of rural areas largely continues to remain on the balance sheets of agricultural enterprises, thereby increasing their non-productive costs and reducing profitability. Large part of engineering objects is not transferred yet to municipalities due to insufficient budget of these objects.
8. The soil quality is declining due to poor fertilisation.
9. There is no reliable monitoring system of quality of the foodstuffs and its production.

Agenda 2001-2010

Having discussed the trends of agricultural production and food consumption in Russia, we would like to focus on the perspectives of their development.
As discussed in (Gordeev, 2001), the state policy is aimed at improvements of the present situation in economy of agricultural sector ('…forming the effective and stable production ensuring needs of the population in agricultural products'), in social life of rural population ('…limiting the gap in living standards of rural and urban population, maintenance of the federal standards of social service of the rural population') and in environmental system ('…conditioning the maintenance of production of ecological food products and ecological security of the population, animal and vegetative world').
In the present moment the regions of Russia accumulate up to 2/3 of all directed to agriculture resources from the consolidated budget. Thus, the federal authority focuses not on direct support of agricultural sector but regulates its markets general rules and policies. The federal government focuses on the development and maintenance of food safety of the country (making reserves of the vital food products; organises the delivery of the foodstuffs on territory, which maintenance on the commercial basis is hindered; rendering the food help to the regions under extreme food conditions). The condition of food safety of the country can be determined on the following system of criteria: the actual level and quality of food in relation to regulated sufficient and is minimal levels; sufficiency of the minimum salaries, pensions and allowances to access consumption at the sufficient level; sufficiency of a level of agroproduction in regard to the level of sufficient demand. The state monitors and controls the food safety of the country at the national and regional levels via the executive authorities. Federal government also regulates the organisation of information structure and policy in agro-food system (creation informational and trade systems for the main food markets; promoting the domestic production abroad; information support for agrarian policy implementation). Here we also would like to stress on the role of the federal government in promoting and organising the information centres and extension services. Implementation of this policy, in our view, partly is done through the enlargement of existing education centres. Since 1996, the Moscow Timiryazev Agricultural Academy (MTAA) has taken part in the World Bank "Agricultural Reform Implementation Support Project" (ARIS) as Federal Training Centre (FTC) for extension service staff. The main purpose of the FTC affiliated at the MTAA, which is the leading agricultural institution in Russia, is preparation and retraining the experts of consulting services capable to ensure sustainable development of agricultural extension service of Russia. One of the most difficult problems of the training system is the time limitation, the dearness of learning measures, which is connected to the large transport costs, costs for residing, power supply. That is why FTC has been trying to launch some new additional services, one of which is the distance learning.

A network of regional training centres and FTC branches all over the country is being created now. In particular a number of the FTC branches and Interregional Centres are officially established in Omsk State Agrarian University (West-Siberian Branch), Buryatian State Agrarian Academy (Ulan-Ude, East-Siberian Branch), in the Chuvashia Republic (Volga-region Branch), in Orel State Agrarian University (South-Central Russia Branch), in Tver (Central Russia Branch), Interregional Centre in St.-Petersburg.

The strategic direction of improving the system of training in extension is organisation of Distance Education with usage of modern information technologies and Internet capabilities. The system of remote training will allow effectively to solve a set of problems: to expand essentially a quota of the teaching employees of extension service; to ensure systematic up-dating of knowledge of extension service employees; to reduce expenses for training and retraining the extension staff; to save time of participants in getting new knowledge and up-grade skills.

Since November 2000, FTC has begun an implementation of a program of Distance Education, having placed a page on its site with the specially prepared study materials, tests, questionnaires, etc. The first registered participants have begun their personal programmes in an interactive mode with the teachers of the Centre. At the moment the training is conducted only on "Project analysis" course. In the future the FTC will expand such activity and increase the number of courses.

In order to create a sustainable system of distance education in Russian Extension service it is necessary to execute a number of activities:

1. To adapt all the study materials and software designed in FTC for face-to-face training and transfer them into appropriate form for the distance learning, to duplicate them and disseminate.
2. To develop special pages for the Internet and to place all the adapted study materials and software on them.
3. To organise a permanent system of remote training in an interactive mode with application of the modern forms and methods of teaching (audio and video-occupations, teleconferences, personal tasks, computer testing and remote control of knowledge, etc.).
4. To supply FTC and its regional branches with the special equipment.
5. To organise and to conduct training teachers on methods and means of distance learning. Thus it is necessary to learn and to adapt forward international and Russian experience in this field.

Other main directions of Agenda 2001-2010 are as follows (Gorgeev, 2001).

Financial policy. The given strategy recognises that state financial support of agro-food sector can not be essentially increased. There is a necessity to create a branch of financial infrastructure such as specialised state agrobank (Roselkhozbank). Roselkhozbank as the state agent should inspect target use of the credit. The program of preferential crediting of agriculture in the long term can become the major tool for improving the investment climate in agro-food sector. Roselkhozbank can act as a guarantor of the newly established cooperative credit organisations (CCO). CCO's are established to promote the development of the crediting institutions by granting them tax privileges. CCO's will work as department of mutual aid and mutual crediting, therefore they do not transfer reserve funds to the Central Bank of RF and thus it will enable considerably to reduce the rates of the credits on a comparison with commercial ones. The state establishes the Federal Agency that will specialise on structuring of an agricultural enterprise debts, helps them in the procedures of the bankruptcy and financial recovery.

Production policy. The market prices combined with the effective influence of market supply and demand are the fundamentals of the economic relations in the market of agricultural

production, raw material and foodstuffs. At the same time there will be introduced a system of prices in agriculture adjusted by the state. The object prices will be used as normative indicators to calculate the level of state support to agriculture taking into account the in-between sectors price parity. The support prices are applied to the agricultural production delivered to the state. The threshold prices are applied to protect the domestic agricultural producers from low import production with low prices. The intervention prices and mortgage prices are applied with the purpose of liquidation of production excess or deficit. The state will emphasise on the target prices through its participation on the market as an operator executing market interventions, special custom policies, etc.

Consumption policy. With the purposes to maintain at the necessary level the food safety of the country the state controls the availability of the food products for the population, the quantity and quality of food, its sufficiency in nutritious content. The state system of medically approved food standards for 8-10 vital products (bread, milk, meat, sugar, etc.) will be developed. The standards will be differentiated depending on the socio-economic (age, gender, occupation), climate characteristics and other. The state system of standards will regulate two normative levels of food consumption: sufficient (used for socio-economic calculations of food supply under regular conditions) and the minimal (used for food supply calculations under extreme food situations).

Environmental policy. The government pursues the concept of Low input sustainable agriculture. This concept stimulates the use of widely applied abroad biological, biodynamic and organic systems of agriculture and promotes the sales of ecological purified food products.

Discussion and conclusions

This paper discusses the trends in consumption and production in Russia, the problems of the extension service development, the key strategies of Agenda 2001-2010. During the transition period 1992-1999 agricultural output has declined by 40%. Livestock production has experienced a greater decline during 1991-1999 (40%) than crop production (15%). Number of livestock was significantly reduced. The former state agricultural enterprises are still the main producers in agriculture. The role of family farms during the reform period did not become influential, whereas the household plots became one of the major sources of food for rural inhabitants. The share of production by private households has increased for potato by 13.5%, for meat by 24%, for milk by 17.2% and for eggs by 3.2%.
Since the beginning of the reform, disposable income of Russian population significantly declined resulting in reduction of consumption of the main food products. The greatest reduction (25%-51%) was observed in consumption of meat, fish, milk and eggs. Consumption of most, especially of protein products in Russia, in 1999 was considerably lower than normative sufficient level and than those in the Netherlands.
Agenda 2001-2010 clearly expresses the dominant state policies towards improvements of production, consumption, information service, and environmental system and food safety. The attention of the federal government is given to promoting the food safety of the country and also to the development of the information systems in agriculture. The extension with its training centres, in our view, can serve the needs of the information systems improvement.

References

1. Ekonomicheskoe regulirovanie sel'skokhozyaistvennogo proizvodstva v Moskovskoi oblasti. [Economic regulation of agricultural production in the Moscow Region, in Russian]. Kuleshov N. I . (Eds.). Ministry of agriculture and food of the Moscow Region. Moscow, 2000, 113 pp.
2. Eiteljorge U., M. Hartmann (2000). Russia's agro-food trade and trade agreements. In: Russia's agro-food sector: Towards truly functioning markets. Wehrheim, P., E.V. Serova, and J.von Braun (Eds.) Kluwer Academic Publisher, Boston, pp.243-271.
3. Centre for economic conjuncture (2000). Prodovol'stvennoe obespechenie naseleniya Rossii v 1997-2000gg. [Food supply of Russian population in 1997-2000, *in Russian*]
4. Gordeev A.V. (2001). Main directions of the state agro-food policy in 2001-2010. Moscow. Mimeo. (www.csr.ru).
5. Goskomstat (2000). Russian Statistical Yearbook, Moscow.
6. Gow, H.R. and J.F.M. Swinnen (1998). Agribusiness Restructuring, Foreign Direct Investment, and Hold-Up Problems in Agricultural Transition. European Review of Agricultural Economics, 25(3), pp.331-350.
7. Korotkov V.A., V.V. Birukov (2000). O problemakh rynka productcii sel'skokhozyaistvennykh predpriyatii. [On problems of food market of agricultural enterprises, in Russian]. Ekonomika sel'skokhozyaistvennykh i pererabatyvauschikh predpriyatii, #12, 2000, pp.47-49.
8. Macours, K. and J.Swinnen (1999). Causes for output decline in economic transition: The case of central and Eastern European agriculture. Paper presented at the IX EAAE Congress 1999, Warsaw, Poland.
9. Serova E., J. von Braun and P. Wehrheim (1999). The impact of financial crisis on Russia's agro-food sector. European Review of Agricultural Economics, 26 (3), pp.349-371.
10. Serova E.V. (2000) Russia's agro-food sector: State of the art. in: Russia's agro-food sector: Towards truly functioning markets. Wehrheim, P., E.V. Serova, and J.von Braun (Eds.) Kluwer Academic Publisher, Boston, pp. 81-106.
11. Trzeciak-Duval A. (1999). A decade of transition in central and eastern European agriculture. European Review of Agricultural Economics, 26(3), pp.283-304ю