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The Food Problem in Russian Agriculture

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Abstract

Since the collapse of the Soviet Union, enormous changes have occurred in Russia's agricultural system affecting who produces the food, how much is produced and food trade policies. Despite neo-liberal reforms, Russia finds itself in a roughly similar situation as during the early 1990s: increased food imports attendant with rising input costs for farms and higher food prices for consumers. As a result, one constant for Russia is its continued search for "food security."

Russia's Food Problems Under Yeltsin

When Boris Yeltsin was president, a confluence of factors created a hostile macroeconomic climate leading to a significant decline in food production during the 1990s (see Table 1 on page 7). Using an index of physical volume of output (1990=100), in Yeltsin's last year in office agricultural production by large enterprises (former state and collective farms) declined to 36 percent of their 1990 levels. Moreover, during the 1990s the structure of output changed so that by the end of the decade households and not-large farms were the predominant producer as measured in ruble value (see Table 2 on page 8). Most affected in the decline was the animal husbandry sector. Among all food producers during the Yeltsin presidency, the number of cattle (both beef and milk) and pigs declined by about 49 percent. To put those declines in perspective, during the first seven years of Stalin's collectivization when peasant households rebelled against nationalization, the number of beef cattle decreased by 40 percent and the number of pigs by 33 percent. However, on large farms in the Yeltsin period the number of beef cattle declined by 60 percent and the number of pigs contracted by 64 percent from January 1, 1992 to the end of December 1999. As a result of the decline in livestock holdings, national animal stocks in 1999 were smaller than herds in the late 1950s.

The national decline in domestic food production had two main effects. First, with the deregulation of foreign trade and liberalized food trade policies, declines in domestic production contributed to a significant increase in food imports during much of the 1990s, even as demand and food consumption were falling. In other words, the Russian consumer was substituting cheaper imported food for domestic food products, partly due to availability and partly due to preference. During the 1990s, Russia annually spent several times more on food imports than was allocated in the federal budget for support of agriculture (see Table 3 on page 8). In reality the

financial situation was even worse than what appeared on paper because only a small percentage of what was allocated to agriculture was actually spent. Moreover, inflation continued to erode the purchasing power of the ruble, and annual allocations to agriculture lagged considerably behind inflation.

Russia's relatively open foreign trade policy gave rise to the second effect: perceptions of danger over the nation's "food security." Declines in domestic production and the removal of trade protectionism led to increased calls for Russian food security after 1995. As food imports rose to 40 percent of Russia's food supply – and 85 percent of the meat supply in large cities – advocates of food security supported higher trade barriers in the form of tariffs or even import quotas in order to protect domestic producers. Advocates for food security were found among large farms and private farmers, food-producing regions, food processors, various agricultural interest groups and political parties, as well as in the Ministry of Agriculture.

Russia's national food crisis hit bottom when the ruble was devalued by nearly 75 percent in August 1998 and the harvest that year reached only 47.8 million tons of grain, the lowest since the 1950s. Even though the United States and the European Union offered food aid to Russia that extended into 2000, there were widespread reports of empty shelves, long lines, and hoarding as people stocked up in anticipation of continuing price escalation, even in relatively well-stocked cities like Moscow. Food imports, which had been rising during much of the 1990s, fell immediately after the 1998 financial crisis, but by mid-1999 had resumed their upward trend. When Boris Yeltsin left the political scene at the end of 1999, the problems facing Russian agriculture were multifaceted and the sector was in a catastrophic condition.

Russia's Food Situation After Yeltsin

Starting in late 1999, with Vladimir Putin as prime minister, and continuing when he became president,

Russia experienced a significant rebound in domestic food production. Part of the rebound was the “bounce” that occurred from the 1998 bottom. The changing price relationships between domestic and imported foodstuffs, with domestic products becoming more competitive on price, quality, and packaging, contributed as well. But a good deal of the improvement flowed from a different orientation toward agriculture by the Putin government, particularly since Putin indicated that he wanted to see import levels drop as the country became more self-reliant.

A broad-based strategy of state support for Russia’s agriculture was evident during Putin’s two terms. Policies and programs were introduced to assist large farms and the private sector (private farms and households operating a private plot). These initiatives strengthened each of three main food producers and increased the nation’s food output during 1999 through 2007. In late 2007, the national project in agriculture, which originally ran during 2006–2007, was extended to 2008–2012 (a program called “The Development of Agriculture”). This program envisioned state expenditures of several hundreds of billions of rubles during the next five years. Once Dmitri Medvedev became president, he repeated previous promises that state resources would continue to be used to stimulate development in the agricultural sector.

With governmental programs and financial support to the agricultural sector since 2000, agricultural production rebounded from its deep depression of the 1990s. In 2007 food production had increased for all of the major food products, except milk, in comparison to the 1998–1999 average (see Table 4 on page 9–10).

Moreover, each of the three major producers experienced an increase in food production, although not at equal rates. Private farms’ output since 2001 grew the most rapidly until 2007. As a result, by 2007 the value of private farms’ output accounted for more than 6 percent of national production, or more than three times the percentage obtained during the 1990s. Output on large farms increased steadily, though not as spectacularly as the value on production from private farms. By 2007 the value of output from large farms accounted for about 41 percent of national production. But because large farms had a larger base from which to begin, even lower growth rates translated into large production increases and contributed to higher export volumes for some products, particularly grain. By 2006–2007 Russia had not only established domestic grain reserves, but was exporting in excess of 10 million tons of grain annually during 2005–2007. More broadly, the value

of food exports more than doubled from \$1.6 billion in 2000 to \$9.1 billion in 2007, most of which was grain. Even with this increase, it should be noted that the export of agricultural products accounted for less than 3 percent of the total value of Russia’s exports, as oil and gas exports continued to dominate both in terms of value and volume. Household production, which grew rapidly in the first half of the 1990s and stagnated thereafter, continued to display uneven growth and increased the least among the three main producers (see Table 5 on page 11). In 2007 households continued to produce the highest total value of food production, a position they had held since 1997. In 2007 the value of production from households’ production accounted for almost 53 percent of national production.

The rebound in the domestic economy and an increase in real incomes among consumers facilitated an increase in food consumption. Although differences in consumption levels are evident across socioeconomic groups and regions, the general consumption trend is upward, particularly for meat, a high preference commodity (see Table 6 on page 12). While domestic producers responded to increased demand by producing more meat, the animal husbandry sector was slower to recover and herd sizes remained significantly below 1990 levels. The reason for a slower recovery is that the raising of beef cattle remained unprofitable due in large part to price disparities between feed costs and the wholesale price of beef. While the production and sale of grain was profitable in every year during 2000–2007, the raising and sale of beef cattle was unprofitable in every year during the same period. Because Russia’s meat production continued to lag 1990 levels, imported meat accounted for more than one-third of total supply after 2000 (see Table 7 on page 13). In mid-February 2008 President Putin stated that Russia’s largest cities import 80–85 percent of their meat supply. During 2003–2007 food imports grew at a faster rate than domestic production, thereby reflecting both increased demand and the inability of domestic producers to meet consumer demand (see Table 8 on page 13). In 2007, the value of food imports into Russia exceeded \$27 billion, and during the first half of 2008 alone the value of imports exceeded \$19.5 billion.

Flowing from concerns over food security, trade protectionism increased – including import quotas on various meat and meat products from nations outside the CIS during 2003–2005 and 2006–2009 – even as negotiations heated up for Russia’s entry into the World Trade Organization after 2001. In addition, the government opted for more regulation of internal food

markets in an attempt to protect consumers, including “voluntary” limits on wholesale and retail prices in late 2007 that extended through April 2008. In recent years Minister of Agriculture Aleksei Gordeev spoke many times on the undesirability of high import levels and about the need to regulate food markets to protect domestic producers, and in spring 2008 the government began to draft a federal law on food security.

Russia's Food Problem Today

Russia's food problem today consists of three separate, but related, components. The first aspect of the food problem concerns sectoral production, the second concerns rising retail prices, and the third problem concerns the banking and credit crisis that spread to Russia.

Sectoral Production

The first problem raises questions about why Russia has difficulty feeding itself. Despite an increase in food production from Russia's domestic producers since 2000, advocates of “food security” assert that Russia is dangerously dependent upon imported foodstuffs. Indeed, in 2007 the value of Russia's food imports was about three times the value of its food exports. Among G8 nations, only Japan and Russia are net food importers, and Russia imports almost one-half of the food and agricultural products it consumes each year. There is no single cause but rather a confluence of factors that has created the inability of domestic producers to meet demand.

While domestic food production has rebounded from its decline in the 1990s, growth rates in the agricultural sector have lagged growth rates in the economy as a whole and increases in real income. In other words, domestic production cannot satisfy increased demand that has resulted from higher real incomes. The value of total agricultural production in 2007 was just over 78 percent the level of 1990. But there are important sectoral differences. The value of production of plant products in 2007 was 107 percent that of 1990, but the value of animal husbandry production was less than 58 percent the 1990 level. In 2006, meat consumption had almost reached 1990 levels, but the size of beef and milk cattle herds was only 38 percent of the 1990 level, and domestic meat output was about one-half the 1990 level. During the first half of 2008 demand for meat increased by about 5 percent, forcing policy makers to reduce import duties to meet consumer demand. Meat imports increased which satisfied consumers, but domestic producers called for more protectionism.

Why don't Russian farms just produce more if demand is growing? One reason is that increases in costs

from fuels, feed, and fertilizers have created price disparities between inputs and farmgate prices whereby input prices have risen faster than wholesale prices received by producers. Moreover, many large farms are just emerging or recently emerged from acute financial strain (about 20,000 large farms have gone through bankruptcy procedures during the past four years), and for these farms increased input costs and price disparities restrict economic expansion. Because Russia today is more integrated into the world economy than at any time in the past 60 years, the worldwide increase in the price of oil and feed grains has affected the livestock sector. In Russia, farms have not been sheltered from these commodity price increases, and rapidly rising feed and transportation costs offset the infusion of state financial assistance to the animal husbandry sector.

Another factor restricting production expansion is the shortage of skilled workers and antiquated agricultural machinery and technology. Because incomes for agricultural workers are at or near the bottom of the national income scale, large farms often lose skilled labor to other professions or other branches of the economy. Factor in lower levels of rural amenities, educational and cultural opportunities, and substandard rural housing and it is easy to understand the difficulty of retaining high quality rural labor. As a result, less-skilled labor is used that decreases efficiency and adds to production costs. In addition, it is estimated that much of Russia's technological base in agriculture is two to three generations behind the developed world, a reflection of years of neglect and lack of investment. These shortcomings affect both production levels and yields.

Retail Prices

The second aspect of Russia's contemporary food problem concerns rising retail prices. Since the beginning of 2008, retail food prices have risen significantly – over 11 percent in Russia compared to 3.1 percent in the European Union. In Russia, the hardest hit have been the poorest segments of society that even before escalating food prices spent more than one-half of their income on food. In April 2008 Minister Gordeev spoke in favor of a food security law that would regulate retail prices for some foodstuffs and that would increase subsidies to agriculture. In June 2008 legislators wrote a draft law that would provide food stamps for the poor in Russia. The idea for regulated food prices was not embraced because it conjured up memories of a planned economy, but it did highlight the vulnerability that Russia feels as a result of its food insecurity. A large part of rising food retail prices in Russia reflects

worldwide trends in the price of oil and feed grains such as corn and other food grains, the latter a result of higher biofuel production in the developed world. But Russia has experienced higher price increases than in many other European states. Why? One reason is that food inflation is part of the broader inflationary problem that Russia is experiencing. By June 2008 inflation was running at a 15 percent annual rate (compared to 8 percent in 2007), reflecting an overheated economy and a splurge of government spending as a result of high oil revenues.

Related specifically to agriculture is the gap between demand for and domestic production of high-preference and high cost meat products. Because Russia imports so much of its meat supply, the retail price of meat reflects higher production costs incurred by foreign producers for fuel and transportation, as well as higher feed costs. In addition to rising fuel and feed costs, another factor is that Russia remains plagued by inadequate infrastructure that affects the transportation of food once it is produced. It is both difficult and costly to move food from areas of surplus to areas of demand. Rising tariff rates by transport monopolies increase the cost of the transportation across Russia's vast spaces, thereby creating pockets of deficit for certain commodities. High demand areas therefore turn to imports. Inadequate infrastructure also affects export capacity for the volume of surplus grain that is being produced. This situation in turn limits exporters' earnings and creates disincentives to increase production that may put downward pressure on retail prices of bread and bread products, as well as feed grains. Further, a lack of competitive wholesale markets in many regions adds as much as 30–35 percent to the cost of bread products, as estimated by the president of the Russian guild of bread and pastry makers.

The Financial Crisis

The third aspect of Russia's food problem concerns the recent crisis in banking and credit markets that started in the US and subsequently spread to other regions of the world, including Russia. Attendant with the dramatic decline in the price of oil, the financial crisis poses several critical questions for Russia's agriculture going forward. By November 2008 the price of a barrel of oil was down more than 50 percent from its July 2008 high, so with a decline of oil revenues into state coffers the first question is whether the Russian government will be able to stay the course and fully fund the five year development program in agriculture that was extended in late 2007. It is too early to draw any firm con-

clusions and there have been no published indications of backtracking. Before the financial and credit crisis hit in October 2008 Russia had monetary reserves of \$515 billion. By the end of October the Russian government had announced \$200 billion of bailout funds for banks and other financial institutions, and with an appreciation of the dollar against the ruble suddenly the reserves did not look so large. The allocation of relief funds might affect the willingness and ability to spend the amount of money originally intended, which for agriculture was planned to total over R500 billion by 2012. Russian agriculture already receives much less state financial support than EU nations and other developed countries. For this reason, supporters of the state program to develop agriculture argue that any reduction will have direct consequences on domestic production and will exacerbate food insecurity even more.

A second question concerns the effect the financial crisis will have on investment into agriculture. In recent years the volume of private investment has increased substantially. As the agricultural sector has become profitable, Russian banks, food processors, and other companies have become very active in purchasing agricultural land and even whole farms. But that may change with the global financial crisis and impending world recession. As this article was being completed, the effects of the financial crisis were being felt primarily by oligarchs and less so by ordinary people, but it was precisely Russian oligarchs, their companies, and their banks that in recent years were the primary domestic investors in the agricultural sector.

As the financial crisis spreads throughout other European nations, a corollary question is the effect of the crisis on foreign investment into Russian agriculture. In recent years, foreign investment in agriculture also increased significantly rising from \$154 million in 2003 to \$325 million in 2006. Whether or not this trend will be maintained remains to be seen, but at first glance it appears doubtful as the first stages of the financial crisis brought capital flight and a significant reduction in foreign investment in the Russian economy. It is difficult to see why the agricultural sector would be an exception.

A final question concerns the extent to which the credit crisis will affect the distribution of credit from state-owned Rossel'khozbank to food producers. While the private credit market is still developing and presently unable to provide the volume of credit needed by producers, Rossel'khozbank has been the primary source for state credits and financial assistance to agricultural borrowers (large farms, private farms, and ru-

ral households). If the credit crisis is short-lived then the effects are not likely to be too detrimental over the longer term. But if the credit crisis persists as many analysts believe, the impact on Russian agriculture will be severe as producers may not have access to the credit they need to finance production for current demand or to invest in an expansion of production capacity to meet future demand.

For the short-term future at least, the trajectory of Russia's food problem is unlikely to change significant-

ly. Domestic production will continue to lag demand, consumers will continue to experience upward pressure on retail prices, and Russia is likely to remain a heavy importer of the food it consumes. The irony is that almost 20 years after market reform was begun in agriculture, the Russian countryside and agrarian policies have changed in fundamental ways, but some of the core problems remain.

About the author

Stephen K. Wegren is Professor of Political Science at Southern Methodist University, Dallas, Texas.

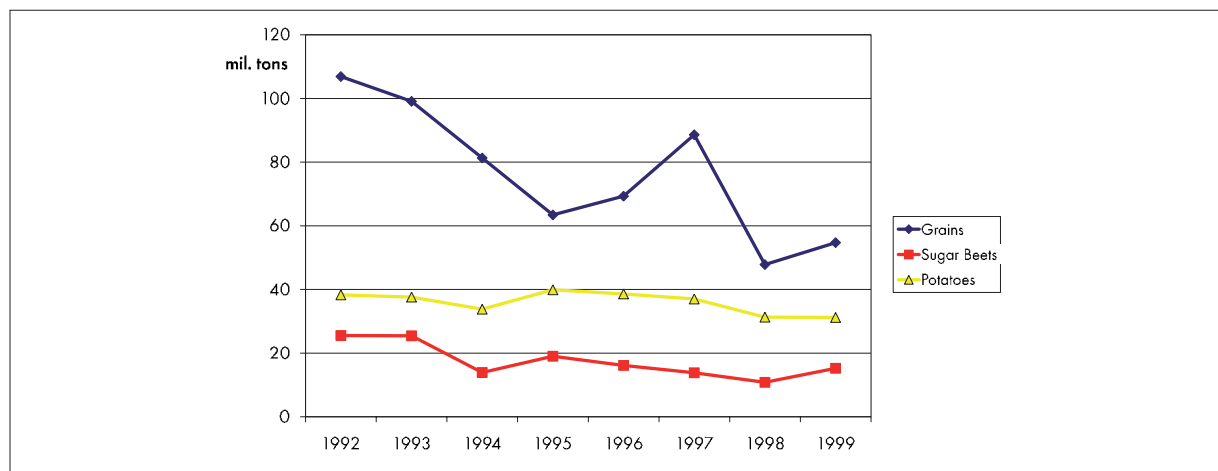
Further reading

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Tables and Graphs

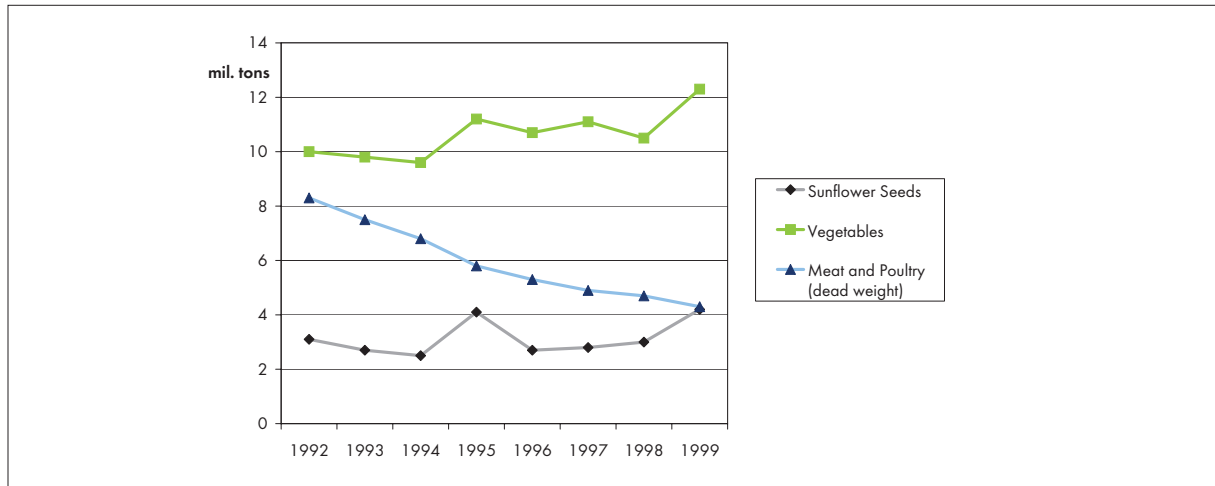
Russian Agricultural Statistics

Production of Grains, Sugar Beets and Potatoes in Russia, 1992–1999 (mil. tons)



Sources: see overleaf

Production of Sunflower Seeds, Vegetables, and Meat and Poultry in Russia, 1992–1999 (mil. tons)



Production of Milk and Eggs in Russia, 1992–1999

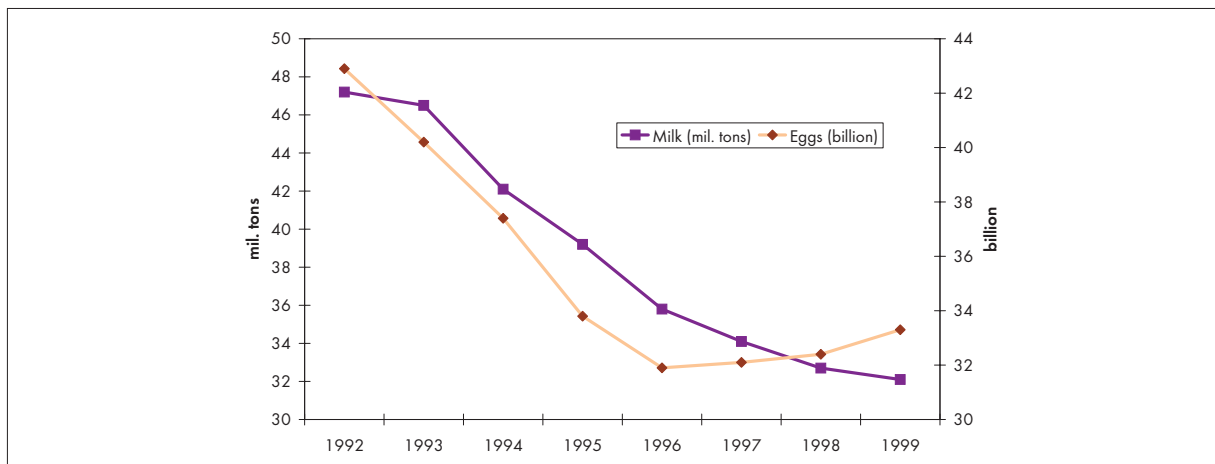


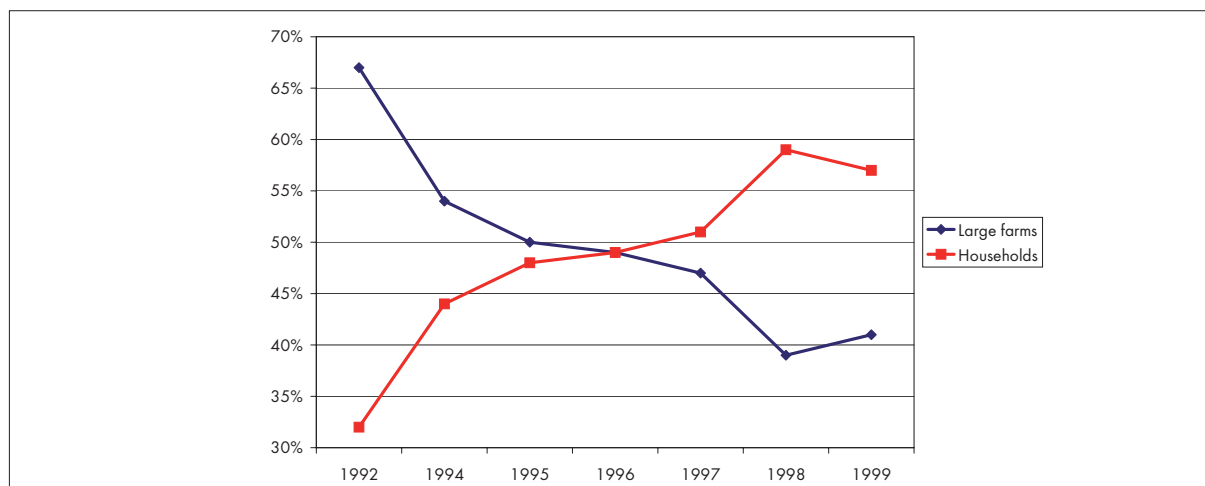
Table 1: Russian Agricultural Production, 1992–1999 (All Categories of Farms)

	1992	1993	1994	1995	1996	1997	1998	1999
Grains (mil. tons)	106.9	99.1	81.3	63.4	69.3	88.6	47.8	54.7
Sugar Beets (mil. tons)	25.5	25.4	13.9	19.0	16.1	13.8	10.8	15.2
Sunflower Seeds (mil. tons)	3.1	2.7	2.5	4.1	2.7	2.8	3.0	4.2
Potatoes (mil. tons)	38.3	37.6	33.8	39.9	38.6	37.0	31.3	31.2
Vegetables (mil. tons)	10.0	9.8	9.6	11.2	10.7	11.1	10.5	12.3
Meat and Poultry (mil. tons, dead weight)	8.3	7.5	6.8	5.8	5.3	4.9	4.7	4.3
Milk (mil. tons)	47.2	46.5	42.1	39.2	35.8	34.1	32.7	32.1
Eggs (billion)	42.9	40.2	37.4	33.8	31.9	32.1	32.4	33.3

Notes: Numbers have been rounded. Grain totals after cleaning.

Sources: Rossiiskii statisticheskii ezhegodnik (Moscow: Goskomstat, 1999), 363–71; and “Sel’skoe khoziaistvo Rossii v 1999 godu (ekonomicheskii obzor),” APK: ekonomika, upravlenie, no. 4 (April 2000): 26–31; Sel’skoe khoziaistvo v Rossii (Moscow: Goskomstat, 2000), various pages; Agropromyshlennyyi kompleks Rossii (Moscow: Goskomstat, 2001), 61–81.

Table 2: Structure of Food Output by Category of Farm, 1992–1999 (% of Total Production)

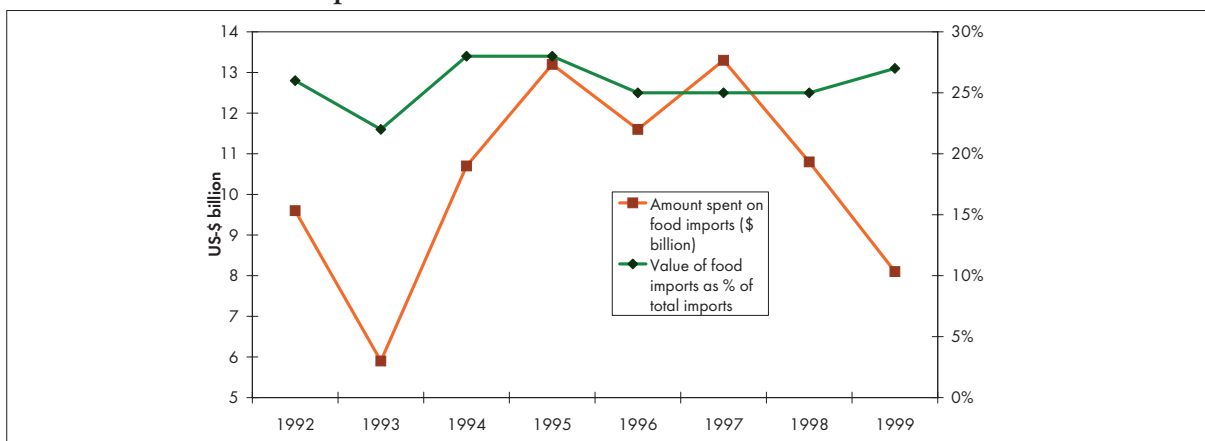


	1992	1994	1995	1996	1997	1998	1999
Large farms	67	54	50	49	47	39	41
Households	32	44	48	49	51	59	57
Private farms	1	2	2	2	2	2	2

Note: Percentage is derived from ruble value of production.

Source: *Rossia v tsifrakh* (Moscow: Goskomstat, 2001), 199.

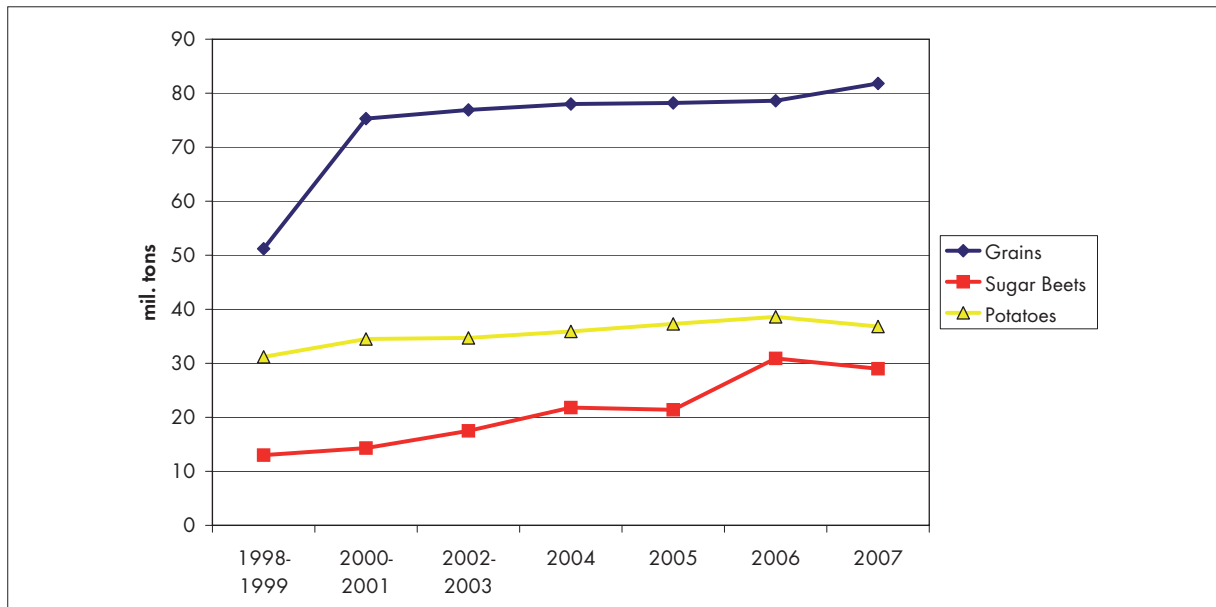
Table 3: Russia's Food Imports, 1992–1999



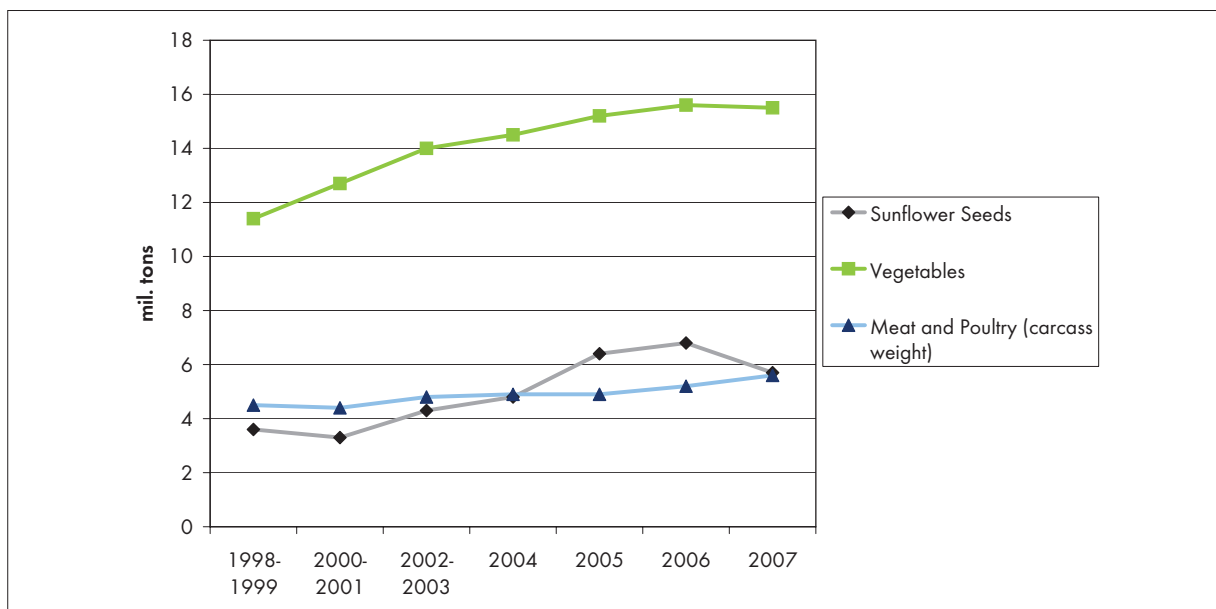
	Amount spent on food imports (US-\$ billion)	Value of food imports as % of total imports
1992	9.6	26
1993	5.9	22
1994	10.7	28
1995	13.2	28
1996	11.6	25
1997	13.3	25
1998	10.8	25
1999	8.1	27

Source: Stephen K. Wegren, *Russia's Food Policies and Globalization* (Lanham, MD: Lexington Books, 2005), 133.

Production of Grains, Sugar Beets and Potatoes in Russia, 1998–2007 (mil. tons)



Production of Sunflower Seeds, Vegetables, and Meat and Poultry in Russia, 1998–2007 (mil. tons)



Note: Data for 1998-99, 2000-01, and 2002-03 are averages for the two years. Grain totals after cleaning.

Sources: Rossiiskii statisticheskiy ezhegodnik (Moscow: Goskomstat, 1999), 363–71; Agropromyshlennyy kompleks Rossii (Moscow: Goskomstat, 2001), 61–81; Rossiia v tsifrakh (Moscow: Goskomstat, 2004), 209–11; www.mcx.ru; www.gks.ru; A. I. Manellia, “Sel’skoe khoziaistvo Rossii v 2006 godu,” *Ekonomika sel’skokhoziaistvennykh i pererabatyvaiushchikh predpriatii*, no. 4 (April 2007): 59–62; and author’s calculations.

Production of Milk and Eggs in Russia, 1998–2007

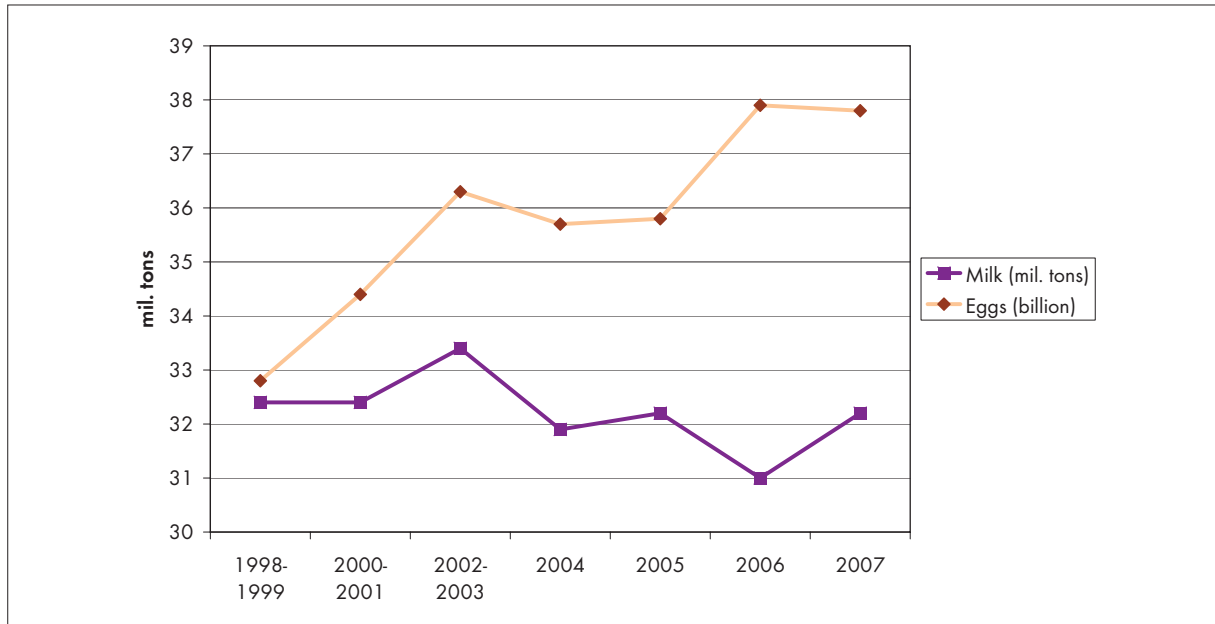


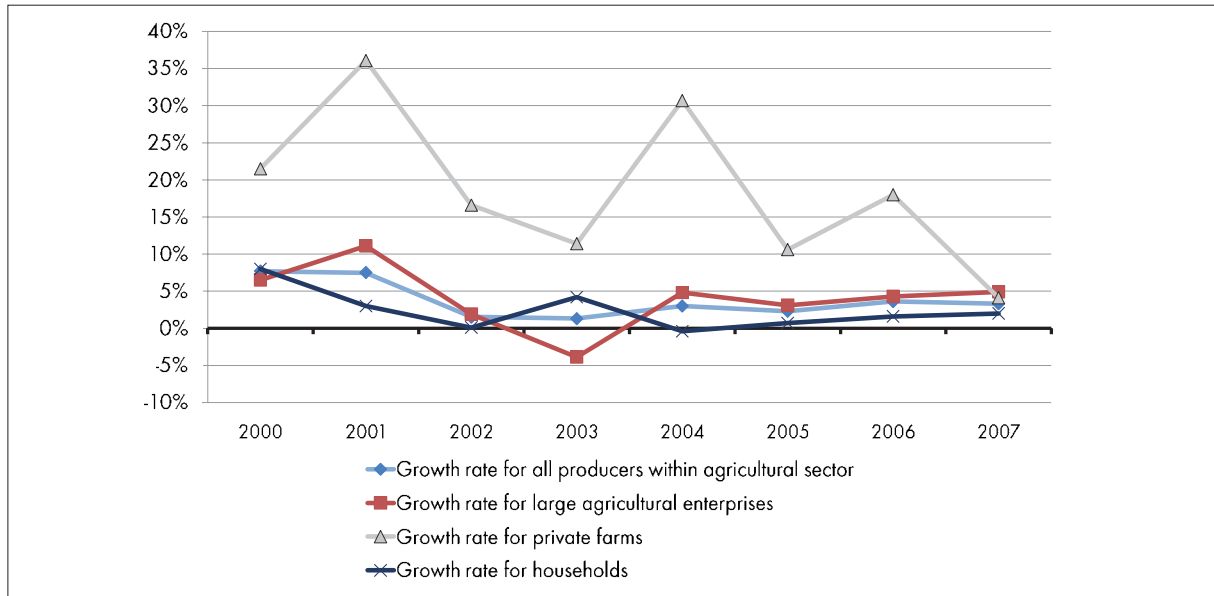
Table 4. Annual Agricultural Production 1998-2007 (All Categories of Farms)

	1998–1999	2000–2001	2002–2003	2004	2005	2006	2007	2007 as % of 1998-1999 average
Grains (mil. tons)	51.2	75.3	76.9	78.0	78.2	78.6	81.8	160
Sugar Beets (mil. tons)	13.0	14.3	17.5	21.8	21.4	30.9	29.0	223
Sunflower Seeds (mil. tons)	3.6	3.3	4.3	4.8	6.4	6.8	5.7	158
Potatoes (mil. tons)	31.2	34.5	34.7	35.9	37.3	38.6	36.8	118
Vegetables (mil. tons)	11.4	12.7	14.0	14.5	15.2	15.6	15.5	136
Meat and Poultry (mil. tons, carcass weight)	4.5	4.4	4.8	4.9	4.9	5.2	5.6	124
Milk (mil. tons)	32.4	32.4	33.4	31.9	32.2	31.0	32.2	99
Eggs (billion)	32.8	34.4	36.3	35.7	35.8	37.9	37.8	115

Note: Data for 1998-99, 2000-01, and 2002-03 are averages for the two years. Grain totals after cleaning.

Sources: Rossiiskii statisticheskiy ezhegodnik (Moscow: Goskomstat, 1999), 363–71; Agropromyshlennyyi kompleks Rossii (Moscow: Goskomstat, 2001), 61–81; Rossiia v tsifrakh (Moscow: Goskomstat, 2004), 209–11; www.mcx.ru; www.gks.ru/free; A. I. Manellia, “Sel’skoe khoziaistvo Rossii v 2006 godu,” *Ekonomika sel’skokhoziaistvennykh i pererabatyvaiushchikh predpriatii*, no. 4 (April 2007): 59–62; and author’s calculations.

Table 5: Growth Rate in Value of Agricultural Production by Sector, 2000–2007 (in percent)



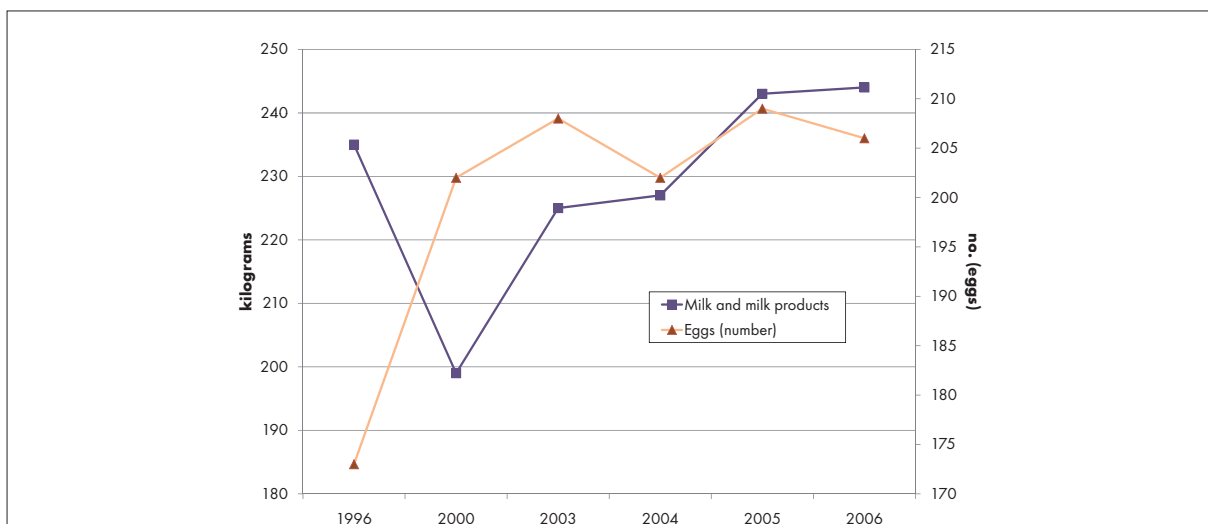
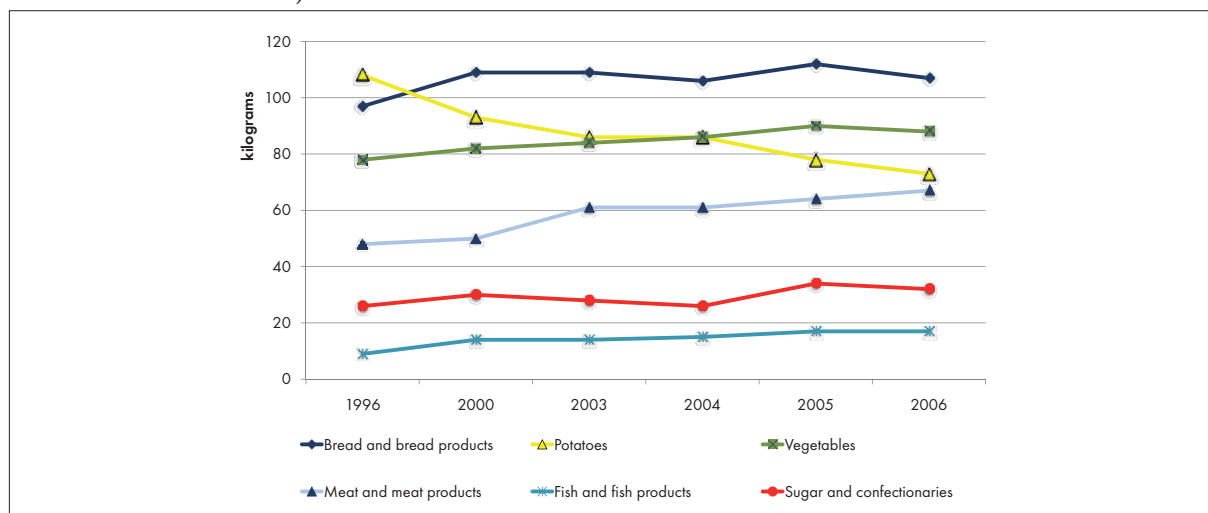
	2000	2001	2002	2003	2004	2005	2006	2007
Growth rate for all producers within agricultural sector	7.7	7.5	1.5	1.3	3.0	2.3	3.6	3.3
Growth rate for large agricultural enterprises	6.5	11.1	1.9	-3.9	4.8	3.1	4.3	4.9
Growth rate for private farms	21.5	36.1	16.6	11.4	30.7	10.6	18.0	4.1
Growth rate for households	8.0	3.0	.1	4.2	-.4	.7	1.6	2.0

Notes: Growth expressed as change in value of output from previous year, measured in rubles.

Private farms include individual enterprises.

*Sources: Rossiia v tsifrakh (Moscow: Rosstat, 2005), 211; Rossiia v tsifrakh (Moscow: Rosstat, 2006), 223; Agropromyshlennyy kompleks Rossii v 2005 godu (Moscow: Rosstat, 2006), 46; A. I. Manellia, "Sel'skoe khoziaistvo Rossii v 2006 godu," *Ekonomika sel'skokhoziaistvennykh i pererabatyvaiushchikh predpriatii*, no. 4 (April 2007): 59-62; Rossiia v tsifrakh (Moscow: Rosstat, 2007), 232; and www.gks.ru.*

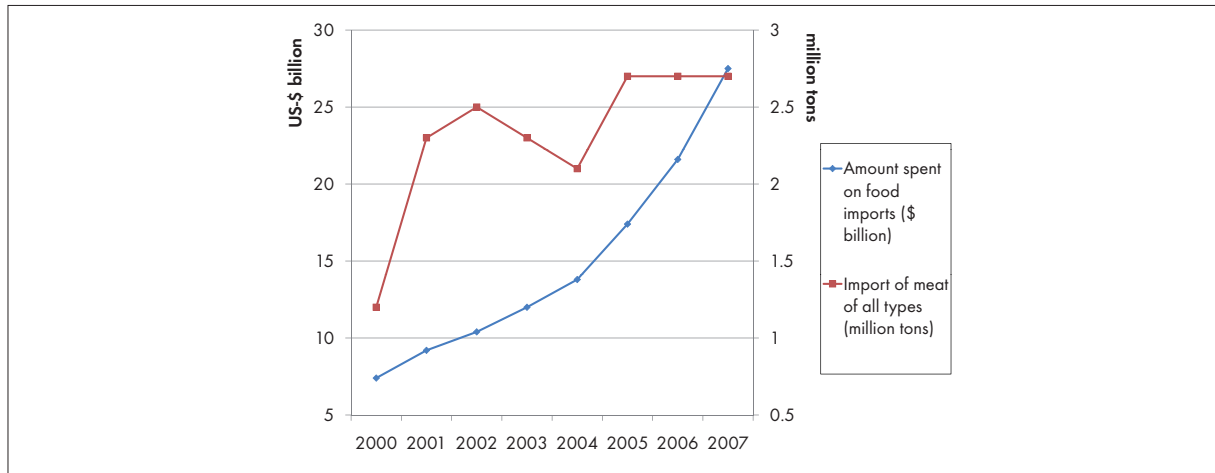
Table 6: Average Annual Food Consumption, 1996-2006, Total Population (in kilograms unless otherwise noted)



Food Product	1996	2000	2003	2004	2005	2006	2006 as % of 1996
Bread and bread products	97	109	109	106	112	107	110
Potatoes	108	93	86	86	78	73	68
Vegetables	78	82	84	86	90	88	113
Meat and meat products	48	50	61	61	64	67	140
Milk and milk products	235	199	225	227	243	244	104
Eggs (number)	173	202	208	202	209	206	119
Fish and fish products	9	14	14	15	17	17	189
Sugar and confectionaries	26	30	28	26	34	32	123

Source: *Potreblenie produktov pitaniia v domashnikh khoziaistvakh v 2006 godu* (Moscow: Rosstat, 2007), 7.

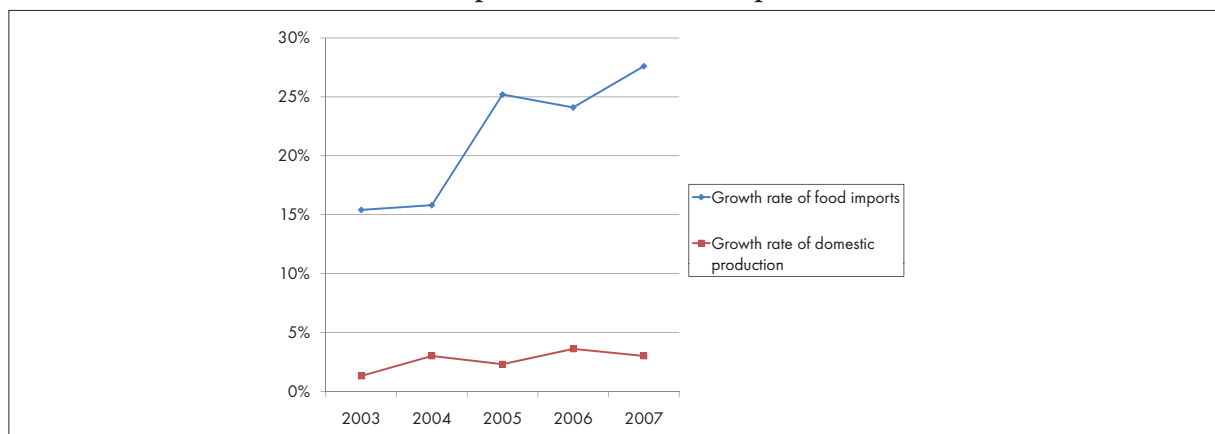
Table 7: Russia's Food Imports, 2000–2007



	Amount spent on food imports (\$ billion)	Import of meat of all types (million tons)	Meat imports as % of total supply
2000	7.4	1.2	21
2001	9.2	2.3	34
2002	10.4	2.5	35
2003	12.0	2.3	32
2004	13.8	2.1	30
2005	17.4	2.7	36
2006	21.6	2.7	34
2007	27.5	2.7	33

Source: I. G. Ushachev, "Nauchnoe obespechenie gosudarstvennoi programmy razvitiia sel'skogo khoziaistva i regulirovaniia rynkov sel'skokhoziaistvennoi produktsii, syr'ia i prodovol'stviia na 2008–2012 gody," *Ekonomika sel'skokhoziaistvennykh i pererabatyvaiushchikh predpriiatii*, no. 7 (July 2008): 2; and author's calculations.

Table 8: Growth in Russia's Food Imports, 2003–2007 (in percent)



	2003	2004	2005	2006	2007
Growth rate of food imports	15.4	15.8	25.2	24.1	27.6
Growth rate of domestic production	1.3	3.0	2.3	3.6	3.0

Note: Growth rate is in comparison to previous year.

Source: "Doklad Prezidenta AKKOR Vladimira Nikolaevicha Plotnikova na XIX s'ezde AKKOR," *Fermerskoe samoupravlenie*, nos. 3–4–5 (2008): 3.

Analysis

Changing Social and Economic Conditions in Rural Russian Villages, 1991–2008

By David J. O'Brien, Columbia, MO and Valeriy Patsiorkovskiy, Moscow

Abstract

The immediate post-Soviet period was a time of severe hardship for most rural residents of Russia. In recent years, however, both material and psychological conditions have improved markedly. Nonetheless, there is considerable unevenness in the economic and social development of the Russian countryside. Results from our surveys of rural households provide an overview of these developments.

An Overview of Changes in Rural Russia Since 1991

Rural residents constitute roughly 27 percent of the total population of Russia. The Russian countryside is extremely diverse in natural conditions, agricultural output, social and economic development and ethnic composition. The variety of rural settings ranges from the highly productive agricultural region in the black earth zone in southern European Russia to heavily forested regions in the Northwest to polar regions. We conducted most of our research in agricultural regions of rural Russia, although in 2008 we began a project in forest-resource-dependent areas in Karelia and Kostroma.

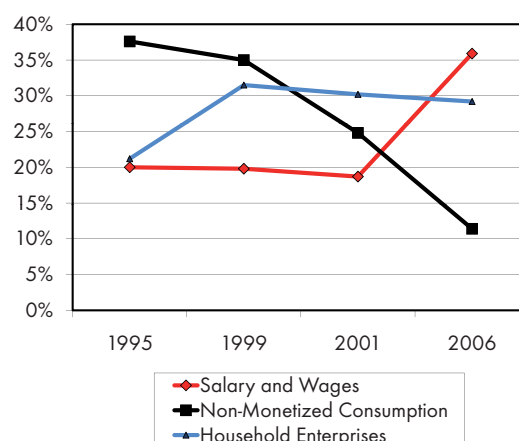
Our research findings are based on a total of ten surveys, from 1991 to 2006, which were funded by the US National Science Foundation, the Ford Foundation, and other foundations. The surveys were conducted in 15 different regions using a stratified sampling strategy to reflect the proportion of different household types in rural Russia.

Material Changes in Rural Villages

The material conditions of life for rural Russians during much of the 1990s were quite difficult and could be best characterized as a period of “survival.” Since 1999, however, rural incomes have experienced a sustained improvement, as they have throughout Russia and indicators of poverty have shown a sharp decrease. In 1993, 69 percent of rural respondents in our surveys fell under the government’s minimum level of subsistence, but this figure dropped to 25 percent in 2003 (the official government figure for rural poverty in 2003 was slightly higher, at 32.5 percent, but was still well below the 1993 figure). Our surveys indicated that the percentage of households owning automobiles increased from 11.5 to 34.5 percent from 1991 to 2003 and almost half (48 percent) of these households had initiated a substantial construction project, either increasing the size of their

dwelling or improving structures for livestock or processing value-added food.

Figure 1. Changing Contributions to Rural Russian Household Income 1995–2006



Source: 1995 & 1999 Russian Village Surveys; 2001 & 2006 NCEEER Surveys

The composition of household economies also has changed during the post-Soviet period. The three trend lines in Figure 1 indicate the relative weight of different sources of income at different points in time. The proportion of income that is “non-monetary consumption” income refers primarily to the food that is grown and consumed by the household. This type of income was highest during the early, most difficult, period of post-Soviet reform, when households used what they produced themselves to survive. Non-monetary income, as a proportion of total household income remains high from 1995 (37.6 percent) to 1999 (35 percent), but drops considerably after 2000 (24.8 percent in the 2001 survey) and in the 2006 survey is less than one-third (11.4 percent) of the amount shown in the 1995 survey.

The second trend line of interest is the one showing the proportion of income that is derived from house-

hold enterprises. Slightly more than one-fifth (21.2 percent) of rural household income in 1995 was derived from this source. As the former collective farms struggled to survive and oftentimes could not pay their employees, the small private plots that had been merely tolerated during the Soviet period became the source of entrepreneurial creativity. Households learned to make value-added products and earn income from a wide variety of small businesses and services. The 1999 survey shows a substantial increase in this source of income, accounting for 31.5 percent of total household income. But, the proportion of income generated by household enterprises leveled off and dipped slightly in the subsequent two surveys that were conducted at the beginning of this decade; 30.2 percent in 2001 and 29.2 percent in 2006.

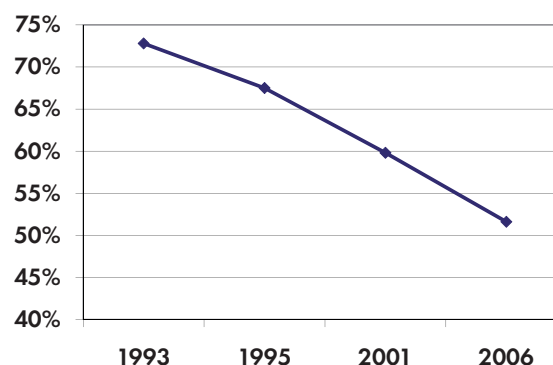
The third trend line shows the contributions of salary and wages, i.e., working for others, to household income. Salary and wage income contributes roughly the same proportion to total household income as does income from household enterprises in 1995 (20 and 21.2 percent, respectively) and declines slightly while household enterprise income accounts for a much larger share of total household income in the next two surveys (19.8 and 31.5 percent in 1999 and 18.7 and 30.2 percent in 2001). In the 2006 survey, however, we can see a substantial shift in household economies, when salary and wage income increased to 35.9 percent while household enterprise income dipped slightly to 29.2 percent of total household income.

The growth of income from salary and wages reflects the overall improvement in the Russian economy. Household enterprise income continues to play a critical role in rural economies, but the survival economy of the early nineteen nineties has been replaced by a “mixed economy,” which combines household self-employment with income derived from working for others.

The Psychological Mood in the Countryside

Our surveys contain two sets of indicators of how rural Russians subjectively have experienced their lives at different times during the post-Soviet period. One indicator is a standard measure of “psychological mood”, the CES-D scale which has been used in the USA and other countries. The CES-D scale used a series of questions in which respondents are asked to tell the interviewer how often they have experienced different symptoms of “depressed mood” – e.g., I felt fearful, I felt lonely, I did not feel like eating, etc. – in the last week (5–7 days, 3–4 days, 1–2 days). Figure 2 shows the trend in depression scores in our surveys from 1995 to 2006.

Figure 2. Percent of Rural Russian Respondents Scoring 16 or Greater on the CES-D Scale by Year

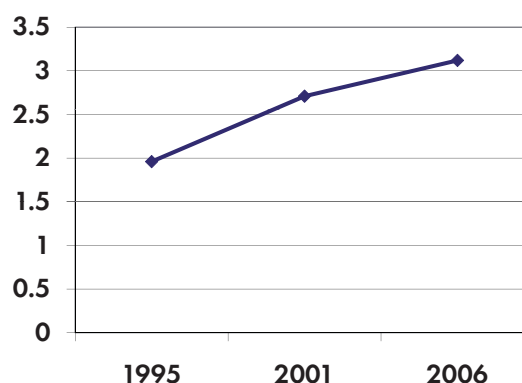


Source: Russian Village Surveys, 1993 and 1995; NCEEER Surveys, 2001 and 2006

The percentage of respondents exhibiting symptoms of depression, as measured by the standardized CES-D scale dropped from 72.8 percent in 1993 to 59.8 percent in 2001 and 50 percent in 2006. While the CES-D number from the 2006 survey is still extremely high, especially compared to populations in rural areas of the United States or Western Europe, it nonetheless shows a considerable improvement in the mood of ordinary people as institutional reforms have taken hold in the Russian countryside.

Another indicator, shown in Figure 3, is the change in level of satisfaction with the direction of the country.

Figure 3. Rural Russians' Satisfaction with the Situation in their Country by Year
Satisfied-Disatisfied (Scale 1–5; 5=Most Satisfied)



Source: Russian Village Survey, 1995; NCEEER Surveys, 2001 and 2006

On a standardized quality of life scale, with a range of 1 to 5, the mean score for “satisfaction with the over-

all situation in the country” rose from 1.96 in the 1995 survey to 3.12 in the 2006 survey, a shift in the positive direction that is substantively as well as statistically significant.

The Emerging Structure of Inequality in Rural Russia

The introduction of some principles of a market economy has meant, however, that rural regions that have less immediate potential for job creation, especially in northern areas, have been less able to retain population than areas in southern regions where there is more opportunity to operate an efficient market-based agricultural economy. In Vologda, in the North of Russia, and in Tver’ in the Central Region, for example, the rural population declined by 17.1 and 13.0 percent, respectively, from 1989 to 2002, while in Belgorod oblast in the Black Earth Region the rural population increased 2.5 percent and in Rostov oblast, in the North Caucasus Region, population increased 15.4 percent, aided by an influx of ethnic Russian refugees from areas of ethnic tension in Central Asia and the Caucasus.

An additional factor accounting for differences in quality of life between regions has been the institutional responses of regional governments to central government reforms. While many regional governments have resisted reforms, either by attempting to replace central government subsidies to the large farms with their own subsidies or by pretending that the reforms will go away somehow, those regional governments that have been most effective in helping household economies have developed comprehensive community development strategies.

In 1994, for example, the Belgorod oblast government created a special fund to assist peasant households to improve existing homes or to build new homes and buildings for storing grain, silage, or for keeping animals. This fund for the support of individual buildings in rural areas lends money to peasant households and they repay their debt in food that they produce, such as meat, milk, eggs, cottage cheese, or sour cream.

Household Income and Inequality between Regions

The structure of household income in high, medium and low income regions in our 2006 survey are shown in Table 1 on page 19. The second column shows that there is considerable variation in mean per capita income between regions, with households in Amur oblast, having incomes 2.3 times greater than households in

Krasnodar krai. The average per capita income of the two highest regions combined, Amur oblast and Altai krai, is 1.7 times higher than the combined average for the two lowest regions, Krasnodar krai and Voronezh.

To control for regional differences in the cost of living, the third column shows the percentage by which the average per capita income in a region is either above or below the minimum consumption basket (a government set of indicators of where the poverty line is located) for that region. The average income of households in the lowest income region, Krasnodar krai, a region with high agricultural output, is 26.4 percent below the minimum basket figure, compared with the average income of households in the highest income region, Amur oblast, a region with mining and road construction employment opportunities, is 39.6 percent above the basket figure for that region.

Columns 4 and 5 show the mean amounts of total household income that are accounted for by salary and wages and household enterprises in each of the regions. Households in Amur oblast receive higher amounts of income from both salary and wages and household enterprises than do households in any other region. Households in the other region in the highest total income category, Altai krai, receive approximately equal amounts of income from salary and wages.

The importance of the mixed household economy is illustrated by examining the remaining seven regions in the sample. With the exception of Krasnodar krai, in which households receive well below average income from both salary and wages and household enterprises, all of the low and middle income regions appear to have some type of imbalance with respect to how households receive income. In the other low income region, Voronezh oblast, another high agricultural output region, household enterprise income is considerably above average and contributes more than 50 percent of total household income, but salary and wage income is less than half of the average for the total sample and only contributes less than one-quarter of total household income.

The relationship between different sources of income in the middle income category is quite interesting. Households in Tartarstan, Moscow oblast and Leningrad oblast all receive well above average income from salary and wages, which clearly pushes overall household income much higher than in the low income regions, but below average income from household enterprises pushes them below the high income region level. Conversely, households in Kurgan oblast and Krasnoyarsk krai receive above average income from

household enterprises, but below average income from salary and wages.

Regional Differences in Mental Health and Subjective Quality of Life

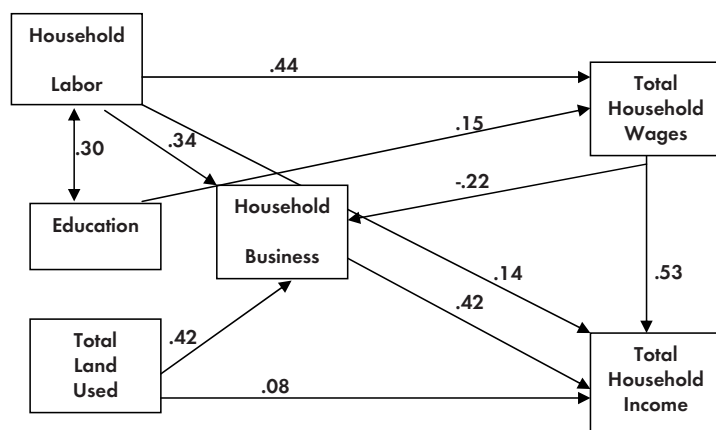
Table 1 on page 19 contains two indicators with which to examine the impact of regional differences in the structure of household income on mental health and subjective quality of life. Column 6 shows that scores on the CES-D depression scale are strongly associated with the average level of income in different regions. The average CES-D score in the low income regions of 23.7 is well above the cutoff point for showing depressive symptoms (16), while the average score for the households in the middle income regions is less than one point above the cutoff point at 16.9 and the score of 12.8 in the households in the high income regions is well below the cutoff point. In fact, the average CES-D scores for households in the high income regions is slightly less than half as high as the average scores in the low income regions.

Column 7 shows a similar association between the overall regional income level regions and the subjective assessment of the quality of life in the country in that region. There is a statistically significant improvement in assessments of the direction of the country as we move from low to middle and high income regions.

Household Capital and Inequality

Figure 4 contains arrows, based on an AMOS structural equation model, that show the direct and indirect relationships between three types of household capital – household labor, education and total amount of land cultivated on a household's total income. The numbers in the model are standardized regression coefficients that indicate the strength of the relationships.

Figure 4. Contributions to Rural Russian Household Income in 2006 (N=900). Source: NCEEER 9 Region Survey



Higher household income is associated with both household enterprise income and income from working for others (wages and salary); betas = .42 and .53, respectively. This indicates that the rural economy in Russia is becoming more “mixed” in terms of how households generate income. The fact that households are no longer dependent only on their own enterprises is another indicator of health in the Russian economy as a whole and offers some hope for the development and maintenance of sustainable rural communities.

Most interesting are the direct and indirect effects of different types of household capital on total income. Although education is typically considered the most important form of household human capital in most economic analyses, it appears to be the least important form of capital in differentiating income between households; it only has a modest (beta = .15) indirect effect on total income through its association with wages and salaries.

The most salient features of this type of enterprise are the enormous demands for hand labor and high level of cooperation between household members, which is characterized by the term peasant moral economy. Household labor has a much larger effect than education on total household income. This includes a modest direct positive effect (beta = .14) and two stronger indirect effects, one operating through salary and wages (betas = .44 and .53) and the other operating through household business enterprises (betas = .34 and .42).

The third type of household capital in the model, size of land used by the household, has both direct and indirect effects on total household income. There is a modest direct effect of land on total household income (beta = .08) and a much stronger indirect effect on total household income through its positive relationship with income from household enterprises (betas = .42 and .42).

Most important, there is no statistically significant relationship between either household labor or education and the total amount of land used by the household. An increase in the amount of land used is not a simple function either of education or family life cycle, but operates independently as a manifestation of the level of a household's “entrepreneurial spirit.”

The Future

Although our work has highlighted improvements in the quality of life in the Russian countryside, there are several conditions that cause us to have some concerns about the future. The first is the development of new forms of inequality between regions and between

households that we described above. Addressing these inequalities will require some significant actions and material resources by the Russian government as well as from regional and local actors. We are currently working with the Ford Foundation on a project that is attempting to identify ways to bring alternative employment opportunities to forest-dependent regions that have been among the most disadvantaged in the post-Soviet rural economy and are very much aware of the difficulties in bringing about the conditions, and especially, attitudes, necessary to stimulate new forms of rural entrepreneurship.

The Russian government's National Project, which addresses smaller scale agricultural enterprises as well as the large enterprises, which had been the exclusive

interest of the central government, is a step in the right direction. The most important unknown, however, is the effect of the current financial crisis, which is affecting not only the Russian financial system, but is causing a dramatic drop in oil revenues, which in turn, severely limits the ability of the government to provide the resources necessary to bring further improvements to rural villages, especially providing the material and social wherewithal to attract younger and more educated migrants to these areas.

Nonetheless, our surveys and personal contacts with rural Russians over a period of 17 years have demonstrated to us that these are people with tremendous resilience who have an uncanny capacity to survive in the face of serious obstacles.

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The National Project: <http://www.rost.ru/projects/agriculture/>

Table 1. Per Capita Income, Salary and Wage Income, Household Enterprise Income, Symptoms of Depression and Satisfaction with the Country in Nine Russian Regions (N=900)

	Mean Monthly Per Capita Income (in rubles) & Rank in Sample (in parentheses)	% Per Capita Income < or > Regional Consumption Basket & Rank in Sample (in parentheses)	Mean Monthly Household Salary & Wage Income (in rubles) & Rank in Sample (in parentheses)	Mean Monthly Household Enterprise Income (in rubles) & Rank in Sample (in parentheses)	Mean CES-D Mood Scale ^a 16+ indicator of depressed mood	Satisfaction with the Country ^b Scale:1–5
Krasnodarskii krai	3,347 (9)	-26.4 (9)	4,159 (8)	3,683 (6)	24.8	2.4
Voronezh oblast	4,634 (8)	7.3 (8)	2,703 (9)	5,670 (4)	22.6	2.6
<i>Low Income Regions</i>	3,991 (8.5)	-9.55 (8.5)	3,431 (8.5)	4,677 (5)	23.7	2.5
Republic of Tatarstan	4,817 (7)	22.3 (3)	6,298 (4)	3,677 (7)	19.1	3.4
Kurgan oblast	4971 (6)	19.9 (5)	5,217 (7)	5,243 (5)	15.3	3.2
Krasnoyarsk krai	5,655 (5)	14.3 (7)	5,284 (6)	6,054 (2)	13.4	3.5
Moscow oblast	5,694 (4)	16.5 (6)	6,735 (3)	1,825 (9)	18.9	3.0
Leningrad oblast	5,736 (3)	22.0 (4)	9,093 (2)	2,180 (8)	17.6	3.0
<i>Middle Income Regions</i>	5,375 (5)	19.0 (5)	6,525 (4.4)	3,796 (6.2)	16.9	3.2
Altai krai	5,983 (2)	30.6 (2)	5,575 (5)	5,897 (3)	15.3	3.3
Amur oblast	7,693 (1)	39.6 (1)	10,224 (1)	8,940 (1)	10.4	3.6
<i>High Income Regions</i>	6,838	35.1 (1.5)	7,900 (3)	7,1418 (2)	12.8	3.5
<i>Total Sample</i>	5,392	17.4	6,143	4,797	17.5	3.1

^a $F(2)=55.695$, $p<.001$; Scheffe – Low Regions > Middle Income Regions, Middle Income Regions > High Income Regions

^b $F(2)= 97.710$, $p < .001$; Scheffe – Middle Income Regions > Low Income Regions, High Income Regions > Middle Income Regions

About the Russian Analytical Digest

Editors: Matthias Neumann, Robert Orttung, Jeronim Perović, Heiko Pleines, Hans-Henning Schröder

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