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## **The Transition to the Market Economy in Rural Russia: Assertions and Findings**

### **Introduction**

Before the collapse of the Soviet Union, observers noted that indicators of quality of life, such as income, education, health, and availability of consumer goods were much lower in rural than in urban areas of Russia [Humphrey, 1988; Patsiorkovski et al., 1991]. Today, a popular perception, both in Moscow and in Western countries, is that conditions in rural areas have worsened [e.g. Moscow Tribune, 1996:1-2; Van Atta, 1993]. This perception is reinforced by the high levels of support for the Communist candidate Ziuganov among rural voters in the recent Presidential elections, which may be interpreted as a desire to return to the old Soviet system. In first round voting, Ziuganov received 46 and 44 percent, compared to 23 and 25 percent for Yeltsin, in the rural oblasti (provinces) of Voronezh and Belgorod, compared to 25 percent for Ziuganov and 45 percent for Yeltsin in Moscow Oblast [Nezavisimaia Gazeta, 1996:3].

We will show, however, that despite the discontent in rural areas, there is evidence that rural households are beginning to adapt to the market economy, as evidenced by their increased production and sales of meat and produce, increases in their purchases of durable goods, and demographic changes which indicate that rural households are restructuring themselves to take advantage of new production opportunities. At the same time, we will note that differences in human, social, technological, and financial capital are producing considerable variation in the success with which individual households and villages have adapted to these new conditions.

Our observations are based on a long-term collaborative project, spon-

sored by the Institute for the Socio-Economic Studies of Population, Russian (formerly Soviet) Academy of Sciences and the Department of Rural Sociology at the University of Missouri USA, which has conducted household surveys in European Russian villages in 1991, 1993, 1995, 1996, and 1997. The last three surveys, sponsored by the National Science Foundation (USA), comprise a panel study of the same households over a three year time period. In addition, over 63 in-depth ethnographic interviews have been conducted with village residents, including village administrators, chairmen of kolkhozy (collective farms) and TOOs (kolkhozy reorganized into 'joint stock companies' in which only kolkhozniki — collective farmers — can have membership shares], fermery (private farmers), new entrepreneurs, teachers, pensioners, and krestianskie khoziaistva (peasant households). Another component of the joint project is a comparative analysis of social services, mental health, and quality of life with a matched pair of Russian and Midwestern American rural villages [Patsiorkovski and O'Brien, 1996].

Two of the villages, Latonovo (Rostov Oblast), population 1,509, and Vengerovka (Belgorod Oblast), population 1,010, are located in the agriculturally rich Black Earth zone of South and South Central Russia, near the Ukrainian border, and the third village, Bolshoe Sviattsovo (Tver Oblast), population 920, is located outside of the Black Earth zone in northern Russia, between Moscow and St. Petersburg. The TOOs in Latonovo and Vengerovka produce cereal grains, sunflower, and beef. The kolkhoz in Bolshoe Sviattsovo produces a variety of dairy products, some grain, some fiber (flax), and wood products.

A stratified sample, based on the proportion of different household types in the villages was constructed from the official list of permanent residents in each village, which is called *The Book of Household Accounts (Kniga ucheta domashnikh khoziaistv)*, includes: (1) single adult households (23.2 percent), (2) retired couples (9.3 percent), (3) employed couples without children (8.7 percent), (4) employed couples with children (28.9 percent), (5) employed couples with children and other adults (10.0 percent), (6) single parents with children (2.6 percent), and (7) other extended family (17.3 percent). Interviews were conducted with the 'head of the household who is primarily responsible for social services and household plot production', which led to a bias toward the selection of more women, who were most likely to be in charge of, and most informed on, these household functions, than would have occurred if respondents were selected randomly within households. Given the higher life expectancy of women, the proportion of women in the sample is not that much greater than their proportional representation in the village populations.

## Conventional wisdom about rural life in Russia

The conventional wisdom about the current and future condition of rural life in Russia can be summarized in five assertions. These are:

**Assertion 1.** In order to transform Russian agriculture and rural life it is necessary first to deal with the legal issue of land reform.

This assertion is based on the notion that the authoritarian traditions of Czarist and Soviet Russia demand solutions from the top. Thus, the inability of the Executive (Yeltsin) and Legislative (Duma) branches of the Russian Central government to agree on the legal parameters of land reform is seen as the major obstacle to restructuring rural life to compete in the market economy. Both the pre-1993 and new post-1993 Russian Constitutions state that land relations in Russia can only be regulated through a law (*zakon*) which is passed by the State Duma, and signed by the President. But, three Dumas, 1990-93, 1993-95 and 1996-present, have been unable to pass a Land Code that would (1) clarify the nature of land relations at the federal level; and (2) be acceptable to the President. In the interim, a number of Presidential Decrees have been issued, yet their legitimacy is uncertain. As a result, private farming interests remain politically weak in Russian national politics [Wegren, 1996].

The struggle between the executive and legislative branches of the federal government has resulted in a stalemate which has left people at the local level in a state of uncertainty regarding ownership of land. Rural Russians, who are rational economic actors, have very reasonable fears that if they take land they may end up losing it and/or pay some type of penalty at some later point in time. This uncertainty over the long-term future contributes to the reluctance of rural households in Russia to make investments in large-scale land holdings and/or to officially register as private farmers.

**Assertion 2.** Rural residents in Russia have a cultural resistance to private farming.

It might be argued that there is cultural bias among Russian peasant households toward collectivized agriculture which pre-dates the Soviet Union [Shanin, 1982]. Although there was a brief time during the early years of the Soviet period, the New Economic Policy (NEP) programme from 1921 to 1928, the most salient feature of Soviet policy toward private farming was the reign of terror which Stalin used to destroy the more successful private farms, the so-called 'kulaks', and to enforce collectivization. Subsequent Communist leaders were not as violently repressive as Stalin, but they, nonetheless, did not reverse the basic Soviet policy of collectivized agriculture. Until very recently, virtually all peasant households have spent their lives working in a collectivized agricultural system. Thus, 'the memory of the twin processes of >kulakization< and forced collectivization six

decades ago is still alive among the Russian peasantry' [Prosterman and Hanstad, 1993:152]. During the Soviet period, rural households were able to sell meat and produce from their own small private plots, but their experience with private farming is much more limited than comparable rural populations in Eastern/Central Europe and the Baltics where collectivization did not begin until after World War II. It might be argued, then, that Russian rural residents have been cut off from the kinds of values and work ethic, including the willingness to take risks, which would allow them to compete in a marketplace economy. This might suggest that the long-term solution to the problem of restructuring Russian agriculture would involve a gradual learning of a new culture or ethic of private farming.

**Assertion 3.** The population of rural areas in Russia is too old to provide the human capital necessary to sustain a class of independent farmers.

The rural population of Russia declined significantly during the Soviet period, producing a disproportionate number of elderly persons, a population with poor health, and a dearth of younger working age adults. This resulted in a substantial drop in the proportion of working age adults in the rural population. Moreover, from 1988 to 1992, the overall population growth rate in Russia declined [Ryan, 1993:52–53; Vassin, 1996].

**Assertion 4.** The quality of rural life is too low to attract younger persons to rural areas.

The decline and ageing of the Russian rural population was in part a result of the mechanization of Soviet agriculture, and in that respect, parallels developments in Western nations. At the same time, however, the outmigration of younger and more educated persons from rural areas was a result of a Soviet policy which discriminated against rural areas in wages and services. Persons in urban areas had access to significantly better education, health, and consumer goods throughout the Soviet era and the official Communist Party ideology saw rural areas as backward. Moreover, the monopoly of mechanized equipment by the large-scale kolkhozy and sovkhozy further reduced the potential capacity of peasant households to sustain private farming on their own [Patsiorkovski et al., 1991]. These conditions, it might be argued, continue to create disincentives for persons with the talent to become successful farmers to live in rural areas.

**Assertion 5.** Russian rural villages lack the informal social structure, associated with civil society, to support a free market agricultural economy.

All authoritarian regimes see intermediary structures between the individual and the state as potential competitors [Kornhauser, 1959; Lomnitz, 1988]. The Soviet leaders were no exception, and attempted to destroy traditional types of voluntary associations, informal marketing and trading networks, and other forms of community attachments which exist in

rural areas in other countries [Patsiorkovski et al., 1991; O'Brien et al., 1993]. Thus, it might be argued that a prerequisite for the development of a class of free farmers in Russia is to first develop voluntary associations and informal social networks to support free market activity.

### Empirical findings about life in rural Russia today

**Finding 1.** Villages and provinces are experimenting with different types of land reform and assistance for peasant households.

There is no doubt that many provinces and local villages have been unable to develop positive responses to the collapse of the Soviet agricultural system. Some provinces have taken either a 'delaying strategy', in which they have been waiting for the Central Government to act on land reform, or a 'defensive strategy', in which they have tried to create new types of subsidies to maintain Soviet-style large-scale farms. A smaller number of provinces have been involved in large-scale experimental land reform programmes, in conjunction with international aid programmes, such as US-AID, but there is little evidence at this time that these experiments have resulted in any kind of restructuring of farming or increased production [O'Brien et al., in preparation].

Nonetheless, the pre-occupation of the Russian central government with its problems, as well as, some limited devolution of authority to provinces and local governments, has created conditions which have permitted some provinces and some villages to create a variety of new rural community development strategies.

In Belgorod province, in which one of our study villages, Vengerovka, is located, a special fund, *fond podderzhki individualnogo zhilishnovo stroitelstva na sele* (fund for the support of individual buildings in rural areas), has been created to assist peasant households to improve existing homes or to build new homes and buildings for storing grain, silage, or for keeping animals. These households repay their debt in agricultural products, such as meat, milk, eggs, cottage cheese, or sour cream which they produce themselves. This programme was initiated in late 1994 and early 1995. The loan repayment is based on the cost per kilo of an agricultural product at the time of the loan (e.g. 10 million rubles would purchase one thousand kilos of meat at 10,000 rubles per kilo). The household pays back the loan, not in rubles, but in-kind, calculated as the equivalent of the rubles borrowed at the time of the loan [Selskaia zhizn, 1996]. This repayment method protects both the fund and the peasant household against inflation. Although the Belgorod programme does not provide direct support for peasant household production, it does generate financial capital to increase the peasant households capacity to produce by improving its ability to incorporate more members from urban and rural areas, as well as its ca-

capacity to keep more animals, or to store more grain or machinery. Another Belgorod provincial effort to improve the condition of peasant households has been a programme to permit local villages to lease equipment to start up new bakeries. The lease is made for a period of twenty years and payments are made with profits from the bakery.

Our surveys indicate that the loan programme in Belgorod province has produced higher average household production than is found in other provinces with similar soil and climatic conditions. Households in Vengerovka, in Belgorod province, for example, had one and one-half times higher average sales of agricultural products than households in Latonovo, in Rostov province, even though both villages are located in the Black Earth Zone and both have relatively easy access to large urban markets.

An example of a different type of community development strategy is found in Rostov province. Here informal social networks of long-term residents in local villages have created conditions which favour the development of a small number of larger scale private farms, as well as, other types of new businesses. Villages in this province are the sites for informal partnerships between former members of kolkhozy, who, through informal agreements with each other and with other members of their villages who have chosen to remain in the kolkhozy or TOOs, have found ways to increase the scale of their production without actually purchasing additional land. Our data show, for example, that, households in Latonovo had an average of 12.4 persons who would assist them with borrowing money, trading goods and services, care of the household, help on the household plot, help with household tasks, and discussing important matters, whereas households in Vengerovka and Bolshoe Sviattsovo reported 10.2 and 10.0 persons, respectively.

In Latonovo, for example, we have observed first-hand, and have conducted in-depth video recorded interviews with two officially registered private farmers who formed an informal partnership and now are the most successful private farmers in the village. These two individuals were not selected in our sample survey, but they worked the largest amount of land of any private farmers in the village. One of these men had been the Party Chairman for the kolkhoz in Latonovo. The other man was a tractor driver for the kolkhoz. Although these two private farmers have used some new legal mechanisms to increase the size of the land they farm, they have also relied upon the informal cooperation of other village residents. In 1991, after registering as private farmers, they received their share of land and property from the collective farm. The amount of land they received, however, was only 6.3 hectares each. They then rented an additional 63.7 hectares each from the local government for a total of 140 hectares. Today, they are farming more than 300 hectares. The additional 160 hectares have been rented to them, on an informal basis, by 25 households in the village.

These 25 households consist mainly of pensioners and public service workers (teachers, nurses, doctors, etc.) who are not dependent on the TOO for salary and wages. Many other households would like to rent land to these registered private farmers but they cannot expand their present operation until they get better equipment. It is especially noteworthy that in this informal arrangement households receive six times more grain per unit of land than they would receive from working the land for the TOO.

The helping networks in Latonovo may also account for the much higher levels of startups of new businesses other than private farming (dry goods stores, clothing repair shops, shoe repair shops, etc.) in this village than in the other two villages. In 1995 and 1996, 15 percent of the households in Latonovo started new businesses, while the corresponding figures for Vengerovka and Sviattsovo were only 2.4 percent and 8.6 percent, respectively.

**Finding 2.** Peasant household production is a rational form of economic organization which can compete in the emerging market economy in Russia.

The term *krestianskoe khoziaistvo* (peasant household) is a literal translation from Russian and is meant to convey a specific meaning of the household as a 'basic unit of production and social livelihood' [Shanin, 1982:412]. By world standards, persons living in these households have relatively high levels of education, they have been exposed to urban influences, and they have had regular access to television, radio, and newspapers from Moscow and foreign countries [Humphrey, 1988:54]. Russian rural households are not illiterate, nor are they isolated, and thus they are not like the persons who are typically described as possessing a 'peasant culture' — e.g. compare [Redfield, 1956] — description of peasant culture with [Patsiorkovski and O'Brien, 1996] — empirical description of the similarities in the socio-demographic characteristics of Russian and American Midwestern rural village residents. Persons living in rural households in Russia refer to themselves by the term *krestianskoe khoziaistvo* [O'Brien et al., 1996].

During the Soviet period, peasant households provided the labour for the *kolkhozy* (collective farms) and *sovkhozy* (state farms). In return, these households received guaranteed salaries (either in the form of shares of the harvest or cash wages, depending on fluctuations in Soviet policy) and services. The latter included support for retail consumer goods sold in village shops, as well as, support for education and health care [O'Brien et al., 1993]. At this time, peasant households were permitted to cultivate small household plots, which typically did not exceed one-third of a hectare, and to sell produce and meat produced on that plot.

Agricultural production by peasant households has become even more important at the beginning of the post-Soviet era. As shown in Figure 1,

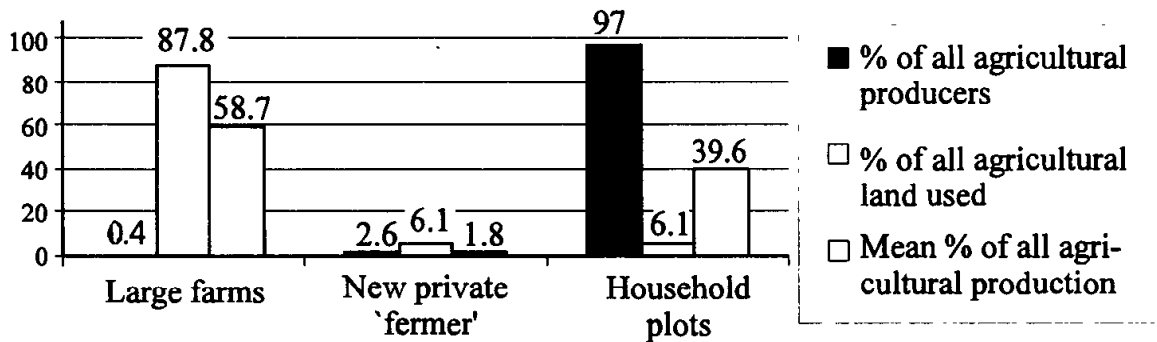


Fig. 1. Percentage representation of agricultural producers, land used, and mean percentage of commodities produced by large farms, farmery and household plots in Russia (1994)

Source: *Ekonomicheskaja Gazeta*, No 39, 1994, p. 18

although peasant households use only a very small proportion of the total land under cultivation in Russia (6.1 percent), they accounted for almost 40 percent of total production in 1994 and 43 percent in 1995 [Rossiia v tsifrakh, 1996:316]. In 1994, the large farms, which include the kolkhozy, sovkhhozy, and TOOs completely dominated production of grains (94.4 percent) and sunflowers (98.1 percent), which require large tracts of land and very expensive equipment, but peasant household plots accounted for substantial shares of the production of meat (43.0 percent), milk (38.5 percent), eggs (37.8 percent) and potatoes (88.1 percent) [Russian Embassy, 1995]. In 1995, the proportion of meat produced by peasant household plots increased to 48.2 percent, and the proportion of milk produced by them increased to 41.7 percent, while the proportion of eggs produced by peasant household plots decreased to 30.0 percent. In 1994, the new category of officially registered farmery (private farmers), constituted a relatively minor proportion of agricultural producers (2.6 percent) and contributed a relatively small amount to overall agricultural production (1.8 percent) in Russia. In 1995, the contribution of private farmers increased slightly to 2.0 percent [Rossiia v tsifrakh, 1996:316].

**Finding 3.** The recomposition of households in rural areas is creating conditions favourable to increased production by peasant households.

From 1995 to 1996, there was a 3.5 percent increase in the average number of members per household (from 2.84 to 2.94) in the three villages in our study. There was also a decrease of 1.7 percent (from 46.48 to 45.69) in the average age of household members in all three villages combined. Moreover, despite the fact that the overall population growth rate of Russia declined between 1988 and 1992, and actually was negative in 1993 [Ryan, 1993:52–53; Vassin, 1996], the rural population, as shown in Figure 2, has increased in recent years.



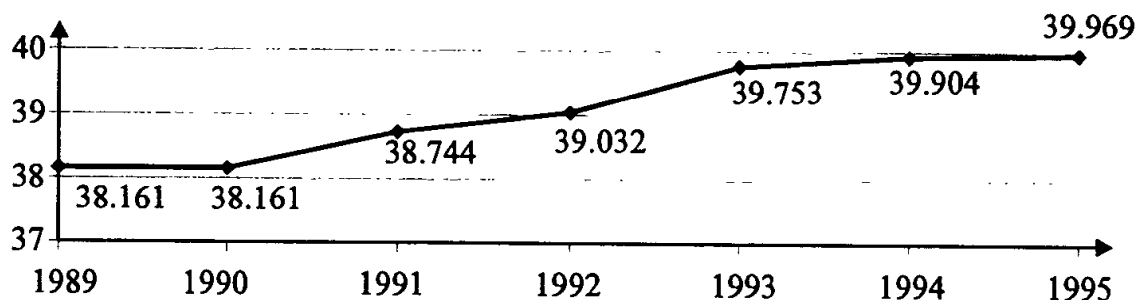


Fig. 2. The size of the rural population in Russia from 1989 to 1995 (in millions)

Source: *Narodnoe khoziaistvo Rossiiskoi Federatsii v 1989*, Moscow, Goskomstat, 1990:16; *Chislennost sostav i dvizheniie naseleniia v Rossiiskoi Federatsii*, Moscow, Goskomstat, 1992, p. 22; *Rossiiski statisticheski ezhegodnik*, Moscow, Goskomstat, 1995, p. 523.

**Finding 4.** Empirical indicators show some improvements in the quality of life in some Russian villages.

One indicator of an overall improvement in the quality of life of many of the rural households in our study is the increase in the number of animals they own. In the three villages there was an overall increase of 11.3 percent of horses, cows, poultry, and pigs combined from 1993 to 1996. Also, from 1995 to 1996 there was a substantial increase in the number of durable goods in the households, including a 39.3 percent increase in the number of cars per household, a 30.7 percent increase in the number of telephones, a 57.3 percent increase in VCRs, and a 100 percent increase in the number of new small businesses (from 15 to 30 businesses reported) in the 508 households in the sample. The average number of kilos of food produced per household increased between 1995 and 1996, while the average number of kilos sold per household decreased. This reflects an increased consumption of food by households which produced it and feed given to animals, as well as, being used to barter for goods and/or services. Of the three villages, Vengerovka had the largest average percentage increase in food consumption per household (26 percent or 2,724 kilos). Sviattsovo was next with a 22 percent (1,595 kilos) increase, and Latonovo reported the lowest increase, 16 percent (1,182 kilos).

There has been a significant growth in new businesses, besides farming, which includes both agriculturally and non-agriculturally related businesses (e.g. dry goods stores, barber shops, clothing repair, and shoe repair). In 1995, a total of 15 households out of 508 households (2.95%) surveyed reported having a business; eight were agriculturally-related and seven were not related to agriculture. Our survey in 1996 showed that three of these businesses did not survive. In 1996, the same sample of 508 households reported a total of 30 businesses (16 of the 30 are agriculturally-related), which is a 100 percent increase in small businesses in the villages in a one year time period! It is likely that the increase in new businesses is due

to the general financial difficulty of large-scale agricultural enterprises (the inability of the kolkhozy and TOOs to provide services or salaries), the increased pressures on peasant households to earn cash, and as a response to new market opportunities.

We should also note that the improvements in the quality of life of persons in rural villages are also matched by positive changes in the country as a whole. Inflation, measured by producer prices and consumer prices, for example, dropped significantly from 1993, when it was 943.76 and 874.62, respectively, to 337.00 and 307.38 in 1994, and 236.07 and 93.67 in 1995 (IMF 1996). In addition, a Public Opinion Foundation Poll, released January 30, 1997 found that of the 1,500 people interviewed across Russia, only 6% said they wanted to emigrate, down from 11% in a similar 1992 survey. The share of respondents saying they would like to go abroad for a limited time to earn money fell from 17% to 11% while those interested in studying abroad fell from 6% to 3%. The percentage of people saying they would not want to leave under any circumstances rose from 47% five years ago to 64% [OMRI, 1997].

**Finding 5.** There is evidence that viable social exchange helping networks exist which assist peasant households in production and sales and this indicates that there is a foundation for a civil society which exists in the traditional social organization of Russian villages.

The Soviets did not entirely destroy all forms of informal cooperation and networking. Soviet citizens, in general [Shlapentokh, 1989], and rural villagers, in particular [Dershem, 1995], came to develop and maintain informal social support and material helping networks which permitted them to cope with and manipulate the command economy. New opportunities for production and sales have encouraged households to develop personal social helping networks to assist them in various phases of these activities.

### **The developing stratification system in the Russian countryside**

Although, as we have argued, there are empirical indicators of positive changes in the quality of life of rural residents in Russia, it must also be noted that the emergence of the market economy has led to new forms of socio-economic stratification. Some households and some villages have been more successful than others in increasing overall production and sales of agricultural products. The reduction of services which had been supported by the kolkhozy and sovkhhozy impacts differently on individual households, depending on their ability to provide services for themselves and/or to obtain the resources to access services in the marketplace. Thus, there is also increasing differentiation between households in the amount of psychological distress they are experiencing. Finally, the weakening of the central

government's control of province and local village affairs has permitted more experimentation in finding ways to assist rural households to increase their productivity, which has meant that some provinces have been more effective than others in finding ways to support rural households during the transition to the market economy [O'Brien et al., 1993; O'Brien et al., 1996].

Figure 3 shows the relationship between different household attributes and its sales of agricultural products. Human capital, as measured by the number of working age adults in the household explains the largest proportion of the variation in productivity between households (19.2 percent in the regression analysis). Higher levels of social capital, as measured by the number of people in exchange networks and community involvement, respectively, however, is also associated with higher levels of household productivity.

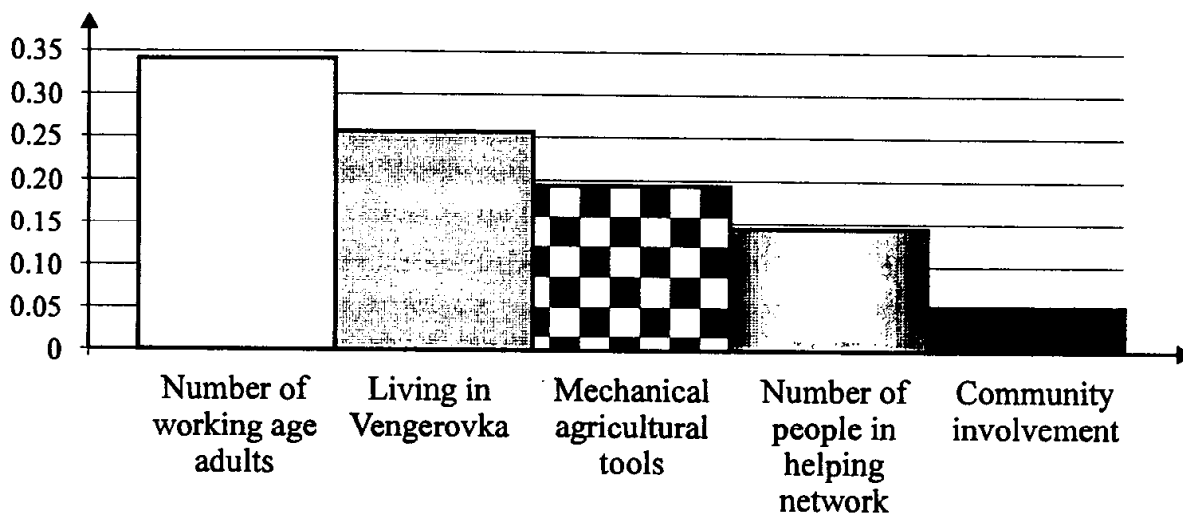


Fig. 3. Standardized coefficients from a regression of log of weighted agricultural sales on number of working age adults in the household, number of people in helping networks, community involvement, mechanical agricultural tools, and living in Vengerovka (N=508) in 1995

Source: *1995 National Science Foundation Survey of Households in Three Russian Villages*, Principal Investigators, D.J. O'Brien and V.V. Patsiorkovski.

The strength of these relationships is much less than in the case of the human capital measure, the number of working age adults in the household. Nonetheless, these two variables increase the amount of explained variance by 4.3 percent. Having mechanical agricultural tools is also associated with higher productivity. These tools include equipment for separating milk from cream, an important step in the development of value-added dairy products, equipment for processing hams and sausages, spraying equipment for fruit trees, and cultivation implements which can be used with tractors that are borrowed from the kolkhozy or TOOs. Approximately 10 percent of the households in the sample have one or more of these tools. This variable, however, only explains 1.6 percent to variance in amount of sales by households.

Living in Vengerovka, which is located in a province with the programme for household credit, is associated with higher levels of sales of agricultural products. The amount of variance in household production explained by this variable, after the human, social, and technological capital variables have been entered into the equation, is 5.5 percent. Peasant households in Vengerovka produced 1.8 times more meat than their counterparts in Latonovo (which is also in the Black Earth zone) and total sales of meat were more than twice as great (2.2 times more) in Vengerovka than in Latonovo in 1995. During the same time period, households in Vengerovka had 1.6 times greater overall sales than did households in Latonovo.

This suggests that perhaps the incentive programme for household building construction in Vengerovka is somehow associated with higher levels of community involvement. One interpretation here is that a by-product of encouraging greater household production is to create incentives for greater community involvement. Another interpretation, however, is that levels and types of community involvement were different in Vengerovka prior to the introduction of the provincial credit programme. Dershem's [1995] study of Latonovo and Vengerovka, for example, showed that Latonovo is a very tight knit village, consisting largely of old time residents whose family histories in the village go back a considerable period of time. This has resulted in a large number of very strong but narrowly focused kinship networks. These networks, as we saw earlier, facilitated the development of a small number of successful private farmers, as well as, an increase in the number of non-farming private businesses within their family circles. The networks in Vengerovka, on the other hand, although smaller, are less kin dominated, and more diverse than those in Latonovo, and, as a result, have facilitated a much more integrated growth in entrepreneurial activity among village residents. In our view, Vengerovka appears to possess more of the broad-based 'entrepreneurial social infrastructure' referred to by Flora and Flora [1993], especially with regard to 'symbolic diversity', which facilitates the flow of new information about new opportunities to a broader cross-section of the citizenry than does the more narrowly focused networks found in the village of Latonovo.

It is also interesting to note that in 1993 Latonovo had a village bakery but Vengerovka did not, but by 1995 the situation had been reversed, with the bakery in Latonovo closing while a new bakery had opened up in Vengerovka. The bakery in Latonovo closed because the TOO and local government were no longer able to continue making contributions to subsidize its operation, whereas the new bakery in Vengerovka was created by a new credit programme (funded at the province level) which permitted the village to lease new bakery equipment and to make the monthly payments on that lease with profits from the sale of bread.

### Household differences in stress levels

Figure 4, which is also based on data from the first wave of the panel study in 1995, shows how households are becoming differentiated in terms of the level of stress, as measured by the CES-D scale [Dershem et al., 1996], they are experiencing during the transition to the market economy. The variables measuring age and education were eliminated from the regression analyses because they are highly correlated with the number of adults in the household. Similar to what would be found in a standard American sample survey, women and persons who have experienced negative life events show higher symptoms of stress, while persons with better health show fewer symptoms.

Not surprisingly, higher levels of health satisfaction are associated with feeling less depressed. Human capital, as measured by the number of working age adults living in the household, as well as social capital, which is measured by how much respondents feel that they fit into their village and the number of people in their helping networks, are also associated with showing fewer symptoms of depression.

The relationship between increased household sales and symptoms of depression is, however, complex. Agricultural sales, which are higher in Vengerovka than in the other two villages, are negatively associated with symptoms of stress, but, living in Vengerovka also has a positive relationship to higher levels of stress. This suggests, therefore, that increased participation in the new market economy may be a 'mixed blessing' for Russian peasant households, producing some benefits but also some significant psychological costs. Public opinion surveys in Russia show that Russian citizens, in general, are very much aware of these costs and benefits of the new economic situation (e.g. [Rose, 1996]).

### Conclusion

There are five specific implications of the findings just reported for the larger issue of the restructuring of rural areas in the post-Communist societies of Central/Eastern Europe and the former Soviet Union.

(1) Empirical field research can often yield findings which are at odds with gross generalizations that are made from macro-economic statistical indicators. Macro-economic indicators, for example, appear to have grossly underestimated the extent to which rural Russian households have been adapting to the emerging market economy, in spite of the lack of progress in land reform by the Russian central government.

(2) During this difficult period, rural families are maintaining and developing their own household production capacities, which are based on the growth of their human and material capital. Households are also developing social capital in the local village through informal arrangements

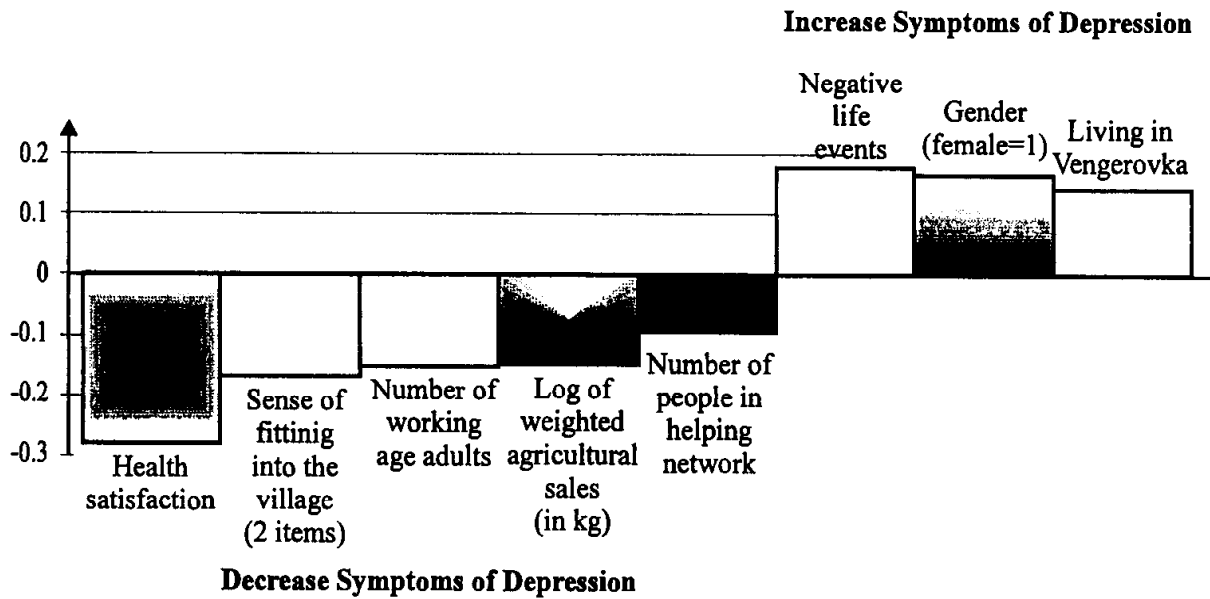


Fig. 4. Standardized coefficients from a regression of CES-D scores on demographic variables, number of working age adults in the household, number of people in helping networks, fitting in the village, log of weighted agricultural sales, and living in Vengerovka (N=482)

Source: *1995 National Science Foundation Survey of Households in Three Russian Villages*, Principal Investigators, D.J. O'Brien and V.V. Patsiorkovski.

with other villagers to increase the amount of land they farm, to increase their access to informal credit, and to improve their ability to market their products [O'Brien et al., in preparation].

(3) The pivotal role of human and social capital at the household and village levels generally is not recognized in macro-economic analyses of agricultural restructuring in Russia. The adjustment of real people to the painful exigencies of a market economy, which has been thrust upon them suddenly, depends on their ability to restructure their households and their interpersonal connections with persons outside of the household. Especially important here is the role of community attachment in economic adjustment.

(4) The success of the Belogorod credit programme, which was empirically shown to have produced higher levels of production in Vengerovka, indicates that it is possible to improve the lives of rural residents in a transitional economy through creative credit programmes which emanate from regions far from a nation's capital.

(5) A serious challenge for policy-makers, both within a nation affected and within the international community, is to deal with the new forms of stratification which are developing as some households and some villages are more successful than others in coping with the emerging market economy. One of the key roles for social scientists, in this regard, is to identify household and village characteristics which make households more or less competitive.

## Bibliography

- Dershem, L.D., 1995, *Community and Collective: Interpersonal Ties in Three Russian Villages*, unpublished dissertation, Columbia, Missouri, University of Missouri.
- Dershem, L.D., Patsiorkovski V.V. and O'Brien, D.J., 1996, *The Use of the CES-D for Measuring Symptoms of Depression in Three Russian Villages*, *Social Indicators Research* 25:1-20.
- Flora, C.B. and Flora, J.L., 1993, *Entrepreneurial Social Infrastructure: A Necessary Ingredient*, *Annals, AAPSS* 529:48-58.
- Humphrey, C., 1988, *Rural Society in the Soviet Union*, [in:] *Understanding Soviet Society*, edited by Sacks M.P. and Pankhurst, J., pp. 53-70, Boston, Allen and Unwin.
- IMF, 1996, *International Financial Statistics*, International Monetary Fund, XLIX (number 9):922.
- Kornhauser, W., 1959, *The Politics of Mass Society*, New York, The Free Press.
- Lomnitz, L.A., 1988, *Informal Exchange Networks in Formal Systems: A Theoretical Model*, *American Anthropologist* 90 (No 1):42-55.
- Moscow Tribune, 1996. The Moscow Tribune, March 12, 1996, pp. 1-2.
- Nezavisimaia Gazeta, 1996, No 109 (1188), 18 June, p. 3.
- O'Brien, D.J., Patsiorkovski, I. Korkhova and L. Dershem. 1993. The Future of the Village in a Restructured Food and Agricultural Sector in the Former Soviet Union. *Agriculture and Human Values* 10:13-22.
- O'Brien, D. J., Patsiorkovski, V.V., Dershem, L.D. and Lylova, O., 1996, *Household Production and Symptoms of Stress in Post-Soviet Russian Villages*, *Rural Sociology* 61(4):674-698.
- O'Brien, D.J., Patsiorkovski V.V. and Dershem, L.D., in preparation, *Rural Responses to Land Reform in Russia: An Analysis of Household Land Use in Rostov, Belgorod and Tver Oblasts from 1991 to 1996*, [in:] Stephen K. Wegren (editor), *Comparative Land Reform in the Former Soviet Union*.
- OMRI, 1997, Daily Digest, No 22, Part I, 31 January.
- Patsiorkovski, V., Bonnano, A., Chinn, J. and O'Brien, D, 1991, *Selected Rural Issues in the USA and the USSR: A Comparative Agenda*, *The Rural Sociologist* 11 (No 2):21-35.
- Patsiorkovski, V. and O'Brien, D.J., 1996, *Research Methodology and Quality of Life in Russia and the USA*, Library of Rural Sociology, Volume 1, Moscow, ISESP, Russian Academy of Sciences.
- Patsiorkovski, V. and O'Brien, D.J., in press, *Material Changes, Subjective Quality of Life, and Symptoms of Stress in Three Russian Villages*, *Journal of the Community Development Society*.
- Prosterman, R.L. and Hanstad, T, 1993, *A Fieldwork-Based Appraisal of Individual Peasant Farming in Russia*, [in:] Van Atta, D. (ed.), *The Farmer Threat: The Political Economy of Agrarian Reform in Post-Soviet Russia*, pp. 149-189, Boulder, Westview Press.
- Redfield, R., 1956, *Peasant Society and Culture*, Chicago, University of Chicago Press.
- Rose, R, 1996, *New Russian Barometer V: Between Two Elections*, Moscow, Center for the Study of Public Policy and VCIOM (All-Russian Centre for Public Opinion).
- Rossiiia v Tsifrakh, 1996. Finansy i statistika. Moscow, Goskomstat Rossiiskoi.
- Russian Embassy, 1995, *Statistics on Agricultural Production provided by the Russian Embassy in Washington, D.C.*, reported by Betty B. Brown through E-Mail, RUSAG-L@UMDD.UMD.EDU.

- Ryan, M., 1993, *Social Trends in Contemporary Russia: A Statistical Source Book*, London & New York, St. Martin's Press.
- Selskaia Zhizn, 1996, February 24, No 22 (22014) & March 14, No 29 (2201).
- Shanin, T., 1982, *Defining Peasants: Conceptualisations and De-Conceptualizations*, *The Sociological Review* 30:407-431.
- Shlapentokh, V., 1989, *Public and Private Life of the Soviet People*, New York, Oxford University Press.
- Van Atta, D., 1993, *The Farmer Threat: The Political Economy of Agrarian Reform in Post-Soviet Russia*, Boulder, Westview Press.
- Vassin, S., 1996, *The Determinants and Implications of an Aging Population in Russia*, World Wide Web, Rand Corporation Home Page, WWW.RAND.Org/publications/cf/cf124.Chap6.html.
- Wegren, S.K., 1996, *The Politics of Private Farming in Russia*, *The Journal of Peasant Studies* 23 (No 4, July):106-140.