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# **Difficulties for the Development of Agricultural Cooperatives in Russia: The Case of the Kurgan Region**

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## **Abstract**

This study concerns the political, economic and socio-psychological conditions for marketing and supply cooperatives in Russian agriculture. An analysis of secondary data indicates that neither political nor economic conditions inhibit the development of cooperatives. Therefore, the focus is directed towards the socio-psychological factors. The aim of the study is to empirically explore the extent to which socio-psychological factors explain the difficulties for agricultural cooperative development within the Kurgan region of the Russian Federation. Based on literature concerning cooperative members' attitudes, values, commitment and similar variables, four hypotheses are suggested. These are tested empirically on the basis of data from a total of 927 agricultural producers, both members and nonmembers of existing cooperatives. The findings reveal that especially the level of trust in others is crucial. Furthermore, the involvement is low among non-members, their attitudes to cooperatives are poor, and their belief and experience in democratic governance are weak.

**Key words:** Russia, transition agriculture, cooperatives, socio-psychology, trust

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## Introduction

The institutional Russian reforms from the beginning of the 1990s meant the introduction of a private property institution on land and other agricultural resources and the creation of new models for management. A result is the formation of new agricultural entities, which belong to three categories: reorganized agricultural enterprises, family farms and household growers.

*Agricultural enterprises* are former kolkhozes and sovkhozes transformed into production cooperatives and corporate farms. *Family farms* were established as the result of the individualization of agricultural production during the last reform. In Russian legislation a family farm is an association of citizens (often relatives) for common economic activities (production, processing and marketing of agricultural products). *Household growers* originate from the Soviet period when the rural population was allotted small plots of land for self-sufficient food production. Now these farms produce agricultural products not only for the household but also for sale.

The new organizational models do, however, not mean increased efficiency, which was the primary goal of the reforms. A dramatic decrease in both production volumes and efficiency has occurred among the agricultural enterprises (Ioffe, Nefedova and Zaslavsky, 2004) (see table 1). An investigation of these units as to their internal organization shows that most enterprises have shortcomings due to poorly specified property rights, alignment of residual claims and decision control, and participants' interest protection and incentive structures (Golovina, 2007).

**Table 1. Share of different types of farms in gross output of agriculture in the Kurgan region (%)**

Types of farm	1991	1996	2000	2001	2002	2003	2004	2005	2006	2007
Agricultural enterprises	72.0	50.9	43.8	38.6	30.3	32.9	35.4	39.4	35.1	33.1
Family farms	28.0*	3.2	4.0	4.1	3.3	4.5	4.8	6.0	6.9	6.4
Household growers		45.9	52.2	57.3	66.4	62.6	59.8	54.6	58.0	60.5

\* Family farms and household growers together

Source: Social-economic situation of Kurgan region in 1991-2007. Statistical Collection of Rosstat-Kurgan, 2007.

Despite the seeming simplicity of family farms, the owners face high transaction costs, first spending much time, effort and other resources to get the farms established. Then the production process is complex, not the least because the interaction with suppliers of farm inputs and processors of farm products pose major difficulties. The transaction costs include costs of information gathering, negotiating and entering into contracts, monitoring and protection of property rights. As a result, legislative initiatives and numerous state programs, intended to stimulate the development of farming in Russia, could not prevent many independent farmers from leaving the farming activities. The number of family farmers in the Kurgan area, for example, fell from 5132 in 1994, when the peak was reached, to 1957 in 2007. Besides, family farming has not occupied a strong place in agriculture, neither regarding volume of production nor efficiency.

Due to high uncertainties during the agricultural transformation, the household growers were the most adaptable, productive and motivated units. These organizations began to carry out important tasks for the development of agriculture. They have maintained the volumes of production, and in the first years of reforms they even increased their production because they received new land and equipment during the privatization. Since the year 2000 their contribution to the agricultural production in the Kurgan region is more than 50% (table 1). However, even though the household growers constitute the basic way of survival and the main source of livelihood for many countrymen, their operations are inefficient as they are based on primitive means of production and manual labor. Moreover the aging of the village population is adverse to the development of household growers.

The small and unorganized agricultural units face difficulties when they interact with stakeholders, i.e. suppliers of farm inputs, processors of agricultural products, government and consumers. The high prices of machinery and other farm inputs limit the agricultural producers' opportunities to use modern technology. The agricultural producers are not equal partners to the large holding structures that dominate the processing of agricultural products. Government creates restrictions and obstacles for small agricultural business development. Consumers put forward increasingly stringent requirements to food quality and variety.

Under these conditions the agricultural producers might strengthen their market positions through cooperatives. Agricultural cooperatives exist in virtually all countries with market economies, and they are often strong firms with large market shares (Cropp and Ingalsbe, 1989; van Bekkum and van Dijk, 1997). There are solid theoretical arguments for cooperation among farmers. According to Shaffer (1987), Staatz (1987a, b), Ollila (1989) and many other researchers, cooperatives contribute to reduce the farmers' transaction costs, as farmers normally have high specificity of assets applied in agriculture, a high level of uncertainty, externalities,

etc. Moreover cooperatives are efficient from a farmer perspective as they have a potential to operate at large scale, thereby reducing the average costs in the processing level (Nilsson, 1998). Other researchers point at cooperative advantages in terms of certain types of product development (Søgaard, 1994), innovativeness (van Dijk, 1997), and risk reduction and improved coordination (Schrader, 1989). There are no reasons why these arguments should not be valid also within the Russian agriculture.

This study explores why the cooperative development is so slow, or differently stated, it investigates the prospects for agricultural cooperatives to be established in Russia and especially the Kurgan region. Categories of factors that may affect the development of cooperatives are identified: political, economic, and socio-psychological conditions. The first two categories are investigated through available macro data. The conclusion is that both political and economic factors should not reasonably hamper the development of marketing and supply cooperatives.

As there is no existing information about the socio-psychological conditions pertaining to the agricultural population's view of cooperatives, primary data about these factors are collected, and statistical calculations are conducted. Hence, the aim of the study is to empirically explore the extent to which socio-psychological factors explain the difficulties for cooperative development in the agricultural sector within the Kurgan region of the Russian Federation.

The Kurgan region is a traditional agricultural region east of the Ural mountain range. Almost half (43%) of the population live in rural areas; the agricultural land comprises 4 million hectares; agriculture's share of the gross regional product is 18%. The activities of most cooperatives in the region are connected to meat and milk products – therefore the focus of this investigation is cattle breeding. In the Kurgan area about 500 agricultural enterprises of various legal forms are functioning as well as 1957 family farms and 187,000 household growers. Their average acreage is 6464, 93, and 1.1 hectares, respectively.

This article is structured as follows. Next follows an account of the conditions for cooperative development in the Russian agriculture, divided in the three categories of political, economic and socio-psychological conditions. As information about the latter category is lacking, the subsequent section presents an empirical investigation among agricultural producers in the Kurgan region as to their view of cooperatives. The section has subsections, comprising a specification of variables and hypotheses, data collection, method and results. The final section reports about the conclusions.

## **Conditions for agricultural cooperatives**

### *Political conditions for agricultural cooperatives*

The political conditions for cooperatives in Russia are determined by legislation and agricultural policy on both federal and regional levels. The legal basis for agricultural cooperatives is constituted by laws, introduced in the mid-1990s. According to the legislation, the cooperative sector includes production and consumer cooperative societies. *Agricultural production cooperatives* are organizations uniting citizens for agricultural production within enterprises. *Agricultural consumer cooperatives* are organizations of persons with small household production, family farms and small enterprises for agricultural product processing and marketing, supplying of resources and rendering of services. Agricultural producers can create different kinds of agricultural consumer cooperatives such as processing, marketing, servicing, supply, insurance and credit cooperatives. From a westerner's perspective the Russian terminology is strange, i.e. agricultural cooperatives are labeled agricultural consumer cooperatives. Hence these are henceforth in this article labeled agricultural cooperatives.

The legislation requires the cooperatives to adhere to the traditional cooperative model. They must have open membership, democratic governance (one member – one vote), mainly collective equity capital, restricted transactions with nonmembers, and very small dividends on member investments. They are expected to adhere to values like solidarity and equality.

The government is worried about the fall of the agricultural production and the degradation of the rural territories (Franks and Davydova, 2006). It has realized the necessity for collective structures, which work in the interests of agricultural producers. The establishment of cooperatives is initiated by governmental authorities according to particular programs. Most new cooperatives are created according to the project "Development of agro-industrial complexes". Other state programs encourage the formation of marketing as well as supply cooperatives. However only 43–67% of the newly established cooperatives are operating in reality – the remainder exists only on paper (table 2). In the western world cooperatives are established by the grassroots, whereby member involvement may be strong. As the Russian cooperatives are formed by governmental bodies, the agricultural producers can be expected to be less committed.

According to recently-introduced federal policies, financial support to small agricultural entities, farmers and cooperatives will be realized. Almost six billion rubles (US\$ 225 million) will be available in 2008–2012 to small business, including agricultural cooperatives. The credit support is mainly for funding of costs on interests for cooperatives and agricultural producers, security for loans and

**Table 2. Number of agricultural cooperatives**

Types of cooperatives	Russian Federation Jan, 1 <sup>st</sup> . 2006	According to the National Project (plan), Russian Federation	According to the National project*, Russian Federation	Percent of cooperatives operating in reality	The Kurgan region, Jan, 1 <sup>st</sup> . 2008
Agricultural cooperatives, total	776	2550	3576	56	42
- credit cooperatives	511	1000	1075	67	21
- processing cooperatives	121	550	689	43	6
- supply and marketing cooperatives	144	1000	1812	54	15

\*During 2006 and 10 months of 2007.

Source: The report of Minister of Agriculture of Russian Federation November 27th, 2007 ([http://www.mcx.ru/index.html?he\\_id=981&news\\_id=3981&n\\_page=1](http://www.mcx.ru/index.html?he_id=981&news_id=3981&n_page=1)) and information from the Department of Agriculture and Processing Industry of the Kurgan region.

credits, subsidies for the creation and development of cooperatives, and infrastructure improvement.

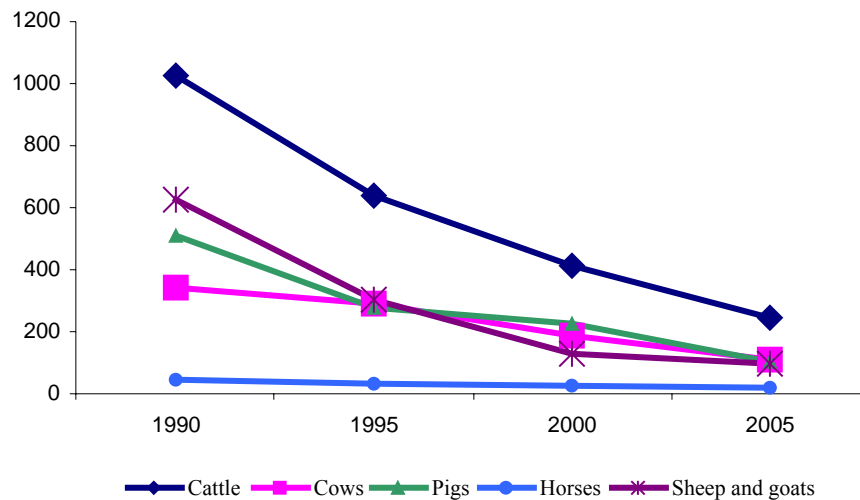
In sum, it must be recognized that politicians and the governmental administration have a positive view of cooperatives, yet also noted that the bureaucratic attitude of the administration hampers the development. The legal framework does not pose any severe restrictions though a more flexible legislation, accepting also other cooperative models than the traditional one, would perhaps be beneficial. A problem might be that the top-down procedure for establishing cooperatives leads to low involvement from the side of the agricultural producers, but on the other hand, this procedure helps to accelerate the process of cooperative establishments.

The generosity that the cooperatives are met with by the politicians is remarkable. The financial support is likely to accelerate the cooperative development. On the other hand, public support is also likely to create a mentality of non-responsibility, so the development might stop after the support money has been spent. Nevertheless, the slow development of agricultural cooperatives in Russia can hardly be blamed on failing political conditions.

*Economic conditions for agricultural cooperatives*

Most agricultural cooperatives in the Kurgan region are involved in activities, which are connected to milk and meat production. Hence, the economic conditions for the development of cooperatives are determined by the situation in cattle breeding. The number of cattle, pigs, horses and sheep fell dramatically after the last reforms (Figure 1). This process is also seen in the fact that many farms stopped their operations and have even been abolished. The output in milk and meat was in 2007 only a fraction of what it was in 1990.

**Figure 1. The livestock population in the Kurgan region (in thousands of heads)**



All operating cooperatives in the Kurgan region deal with dairy farming. They collect raw milk and deliver it to dairy processors and sell farm inputs to milk producers. Considerable changes in recent years in the structure of milk production have affected the production pattern. When in 1991 the agricultural enterprises were the main producers of milk (about 74%), in 2007 more than half of the milk (55%) is produced by family farms and household growers. This rapid change created problems in production and transactions for small farms who eventually could have overcome them through collective action. The markets for milk and meat are oligopolies with a number of large dairy and meat processors. Their price policies are not suitable for the farmers so farmers prefer to sell their products within their villages. As a result, family farms and household growers sell a fairly low percentage of their production to processors (18% and 62%, respectively). At the same time the large processors have low capacity utilization (30–50%).



Therefore the household growers and the family farms as well as many agricultural enterprises are worried not only about production problems. They suffer from high transaction costs in terms of finding good trading partners, information collection and contract enforcement (table 3). To reduce their transaction costs agricultural producers try to change the structure of property rights, and to find new forms of contracts and relationships with partners. Vertical integration through agricultural cooperatives may be a logical way to solve this problem.

The conclusion is that the agricultural producers would probably benefit if they were to belong to cooperative societies. The power balance between the producers and the processors is highly skewed, and so the prices for the agricultural products are low and the prices of the farm inputs are high. The transaction costs that the producers are facing are high. These factors are the classical ones to explain the *raison d'être* for cooperatives in the agricultural sector (Staatz, 1987a; Ollila, 1989). Hence, the weak position of cooperatives in the Russian agricultural cannot be explained by producers lacking economic advantages.

#### *Socio-psychological conditions for agricultural cooperatives*

For cooperatives to function efficiently it is not enough that the members can experience advantages in terms of better prices and other economic benefits. There must also be certain values within the membership such as trust, involvement and a spirit of solidarity and equity (Hakelius, 1996). Such socio-psychological factors are vital especially in traditionally organized cooperatives as the unallocated equity capital implies vaguely defined property rights (Condon and Vitaliano, 1983; Vitaliano, 1983; Cook, 1995; Cook and Iliopoulos, 2000).

These informal institutions, for example trust, readiness to be involved in collective action and cooperative governance, positive attitude to solidarity, equity, democracy and liberty, are instrumental for the solution of common property problems. Without them, free-riding behavior, low involvement, and distrust in the management are likely, all of which are detrimental for the cooperatives' development.

According to the previous sections neither the political nor the economic conditions can explain why the cooperative development in Russia is so slow. Hence, the explanation could be found in the socio-psychological sphere. It may be that formal institutions (e.g. legislation) and the informal institutions (e.g. mentalities) are not aligned. It is relatively easy to change formal institutions whereas it is difficult to transform values, habits, traditions, ethic and social norms. There is, however, no data available to reveal what the producers think about agricultural cooperatives. Therefore, such an empirical investigation is to be conducted.



**Table 3. Evaluation of efforts and time spent on transactions by small agricultural producers**

Type of transaction activity	Household growers				Family farms				Agricultural enterprises			
	low	inter-medialy	high	sum	low	inter-medialy	high	sum	low	inter-medialy	high	sum
Hiring of manpower	7.0	59.1	33.9	100	12.6	37.6	49.8	100	4.9	46.8	48.3	100
Search for supplier of farm inputs	6.1	62.3	31.6	100	14.1	56.1	29.8	100	1.6	59.1	39.3	100
Search of marketing outlets	18.2	43.8	38.0	100	4.2	55.8	40.0	100	1.9	61.2	36.9	100
Collection of information	14.1	56.2	29.7	100	3.8	42.3	53.9	100	2.2	48.4	49.4	100
Negotiation and entering into a contract	8.7	48.7	42.6	100	8.2	46.2	45.6	100	0.9	42.9	56.2	100
Contract enforcement	11.1	51.7	37.2	100	9.1	58.3	32.6	100	2.6	57.3	40.1	100
Conflicts resolution	16.1	15.8	68.1	100	7.0	60.1	32.9	100	2.2	41.4	56.4	100

Source: Golovina (2007): Interviews with agricultural producers in 2006–2007: 233 small agricultural enterprises, 398 family farmers, and 116 household growers. Respondents were asked to estimate their efforts on different transaction activities on three numerical scales.

## **Socio-psychological conditions among agricultural producers**

### *Variables and hypotheses*

The empirical study seeks to find socio-psychological explanations to the agricultural producers' propensity to join a cooperative, or – more often in the Russian case – not to join. Hence, the dependent variable is the agricultural producer's propensity to be a member of a cooperative.

The independent variables should be a number of attitudinal constructs, which in previous studies of cooperative memberships have shown themselves to be important for farmers in relation to their cooperatives. There are many variables of this kind. Robinson and Lifton (1993) mention social cohesion and commitment. Siebert (1994) identifies conservatism and individualism as inhibiting factors to cooperative development. Borgen (2001) finds that the more the farmers identify themselves with the cooperative, the more trust they have in the management of the cooperative. Bhuyan (2007) focuses on members' view of their influence in the cooperative.

Four such behavioral constructs are chosen as explanatory variables. There are:

- a) Attitude towards agricultural cooperatives;
- b) Involvement in cooperatives;
- c) Trust in colleagues and partners;
- d) View on participation in cooperative governance.

### Attitude towards agricultural cooperatives

Attitude is a complex concept, comprising cognitive (beliefs), affective (feelings) and conative (action) dimensions. This multidimensional character of the concept implies that it appears in many previous studies of farmers' view of cooperatives. Overall, the studies indicate that attitudes are crucial, for example in the farmers' choice between cooperatives and investor-owned firms (Jensen, 1990), their evaluation of cooperatives (Misra, Carley and Fletcher, 1993), and their loyalty towards cooperatives (Zeuli and Betancor, 2005).

### Involvement in cooperatives

Involvement is a concept expressing individuals' psychological attachment to a phenomenon. It is related to "identification" (Borgen, 2001) and to "ethics". Given this, Zusman claims it to be of immense importance (1993: 53): "if members'

ethical attitudes are too weak to support the cooperative enterprise, it is bound to fail sooner or later”. Cooperative members may be involved in the business activities of the cooperative, i.e., be loyal in buying from or selling to the cooperative, as well as involved in the cooperative member organization.

Involvement can be based on cooperative ideology, comprising a set of social values, but also on calculative behavior, i.e., the members' view of prices, offerings and other factual factors (Karantininis and Zago, 2001). Cooperative ideology may have some positive effects to the extent that it may generate trust (Shaffer, 1987) and reduce conflict levels (Staatz, 1987a).

#### Trust in colleagues and partners

A widely accepted definition of trust is that “Trust is a psychological state comprising the intentions to accept vulnerability based upon positive expectations of the intentions or behavior of another” (Rousseau, Sitkin, Burt and Camerer, 1998: 395). To the extent that the members are dependent upon the cooperative for the sake of their incomes, they are vulnerable, and hence they may have more or less trust in other persons who are involved in the cooperative.

Many studies confirm that trust is essential in a cooperative context – both trust within the membership and the members' trust in the leadership. James and Sykuta (2005; 2006) provide an overview of this literature. Trust is related to typical cooperative norms such as equal treatment as well as to relative homogeneity within the membership (James and Sykuta, 2005).

Shaffer (1987) asserts that trust makes or breaks a cooperative and Shapira (1999) as well as Hogeland (2006) attribute the decline in cooperative effectiveness to the transition from a high-trust to low-trust culture. Similarly, Fulton and Giannakas (2001) show how member commitment within a cooperative – which could be a manifestation of organizational trust – is affected by cooperative characteristics and affects cooperative performance.

#### View on participation in cooperative governance

For a cooperative to supply its members with the services that they demand, a well-functioning member democratic governance system is important (Gray and Kraenzle, 1998; Bhuyan, 2007). The members should take part in the control of the firm, mainly via their elected representatives. The main component is the election of directors, including the members' willingness to work as directors, but there are also other ways whereby the members can influence the cooperative such as meetings (Gray and Duffey, 1996).

Österberg and Nilsson (2009) found that the single most important explanation to members' satisfaction with their cooperative is the members' perception of their participation in the governance. This factor is even stronger than the product price levels.

### Hypotheses

It may be supposed that the slow development of cooperatives in the Russian agriculture can be explained by most agricultural producers ranking low in terms of attitudes, involvement, trust, and view on participation. The socio-psychological conditions for agricultural cooperatives may be poor.

Hence, four hypotheses are suggested: agricultural producers' propensity to join agricultural cooperatives is low, (1) because they have poor attitudes towards cooperatives, (2) because they are not involved in the cooperatives sufficiently enough to do business with them, (3) because they have little trust in other producers and in trading partners, and (4) because they do not want to participate in governing cooperatives.

### *Data collection*

During 2006 and 2007, 21 agricultural cooperatives have been created in the Kurgan region. These firms are extremely small. A total of 158 producers, most of them household growers, have become members of the new cooperatives (table 4).

**Table 4. Characteristics of agricultural cooperatives in the Kurgan region**

Districts of the Kurgan region	Number of cooperatives	Number of members			
		agricultural enterprises	family farmers	household growers	total
Northwestern	5	2	6	24	32
Southwestern	7	3	16	38	67
Eastern	4	2	4	3	19
Central	5	3	5	32	40
Total	21	10	31	117	158

Source: Information from the Department of Agriculture and Processing Industry of the Kurgan region.

A survey was conducted in the Kurgan region in order to collect data. The respondents were both existing members of the cooperatives and nonmembers. Both marketing and supply cooperatives are included. Among the 158 members,

141 were interviewed, which corresponds to a response rate of 89%. Interviews were also carried out with a random sample of 786 nonmembers (potential members) in each of 24 districts of the Kurgan region. This group of respondents consisted of 111 managers of small agricultural enterprises, 223 family farmers and 452 household growers (with response rates of 82%, 89% and 80% of the samples in each group, respectively).

The interviews were conducted in February, March and April 2008 by one of the authors and 21 of her graduate and postgraduate students which were specially trained for this task. The data were collected through personal interviews, by phone and through mail. A question guide or a questionnaire was used, containing the same set of questions. Table 5 presents some data about age and educational level of the respondents.

**Table 5. Some characteristics of the respondents**

	N	Age, %			Education, %			
		18–35	36–55	56 and over	incomplete secondary school	secondary school	specialized secondary education	higher education
Members	141	11	55	34	11	38	34	17
Potential members:	786	21	53	26	15	34	32	19
• Agricultural enterprises	111	19	63	18	3	24	41	32
• Family farms	223	31	48	21	22	39	26	13
• Household growers	452	17	54	29	15	33	32	29
<i>Total</i>	927	20	54	26	15	35	32	18

The four explanatory variables were represented by one question each in the question guide and the questionnaire. The questions are as follows.

- Attitude towards agricultural cooperatives: “I think that cooperation is important for effective functioning of farmers (producers) nowadays and in the future”;
- Involvement in cooperatives: “All members have to be involved in transaction with a cooperative as much as possible”;
- Trust in colleagues and partners: “I trust my partners and think that they are reliable for collective activities and cooperation”;

- View of participation in cooperative governance: “Participation in democratic management is very important for effective functioning of cooperative and I am ready for this participation”.

These variables were graded according to a Likert scale, ranging from 1 to 6, where 1 is “strongly disagree”, 2 is “disagree”, 3 is “weakly disagree”, 4 is “weakly agree”, 5 is “agree”, and 6 is “strongly agree”.

The dependent variable, the agricultural producer’s propensity to be a member of a cooperative, was measured with one question: “Would you like to be a member of an agricultural cooperative”. It is a binary variable, i.e. there are two possible answers, (1) “yes” or (0) “no”.

### *Method and results*

Descriptive statistics are used to describe the socio-psychological conditions for agricultural cooperatives, thereby testing the hypotheses. Such statistics describe various features of the data. The descriptive statistics provide summaries about the sample and the measures. Among the main tools of descriptive statistics, some indices of interval and ratio levels of measurement are used.

Estimations of the four socio-psychological factors and the farmers’ propensity to be members of agricultural cooperatives are made. As shown in table 6 the results of the statistics demonstrate large differences between members and nonmembers. The members rank high on the six-graded scale in all four explanatory variables. Non-members have lower figures in all respects. There are no clear differences between the three categories of nonmembers.

Among the four explanatory variables, trust is the most problematic one. This variable is the one where the members rank lowest, and it is poorly assessed also by the three categories of nonmembers, especially the household growers, which is the one where more members are most likely to be recruited.

The answers to the response variable say that nine out of ten members are satisfied with their cooperative membership. This figure deviates markedly from the responses from the nonmembers. Only 20% to 30% could imagine themselves as cooperative members. Again there are small differences between the various types of nonmembers.

Hence, it must be concluded that all the four hypotheses are supported by the empirical data. The nonmembers rank so low in terms of attitudes, involvement in transactions, trust, and participation in governance that it is not likely that they would imagine themselves as cooperative members, and only a small fraction says that they would consider that.



**Table 6. Descriptive statistics for the variables**

Variables	Potential members									
	Members		Agricultural enterprises		Family farmers		Household growers		Total	
	mean	std. dev.	mean	std. dev.	mean	std. dev.	mean	std. dev.	mean	std. dev.
<i>Response variable:</i>										
Willingness to be a member	0.9	0.3	0.2	0.4	0.3	0.4	0.2	0.4	0.3	0.5
<i>Explanatory variables:</i>										
• Attitude towards cooperatives	5.2	0.8	2.2	1.5	2.8	1.5	2.6	1.4	3.0	1.7
• Involvement in transactions	5.3	0.7	3.8	1.3	3.4	1.3	3.1	1.2	3.6	1.4
• Trust in colleagues and partners	4.4	0.8	3.0	1.3	2.9	1.4	2.7	1.2	3.0	1.3
• Participation in governance	5.1	0.8	2.8	0.9	3.5	1.2	3.0	1.2	3.4	1.3

## Discussion and conclusions

The findings should be understood in the light of the current political and economic situation in Russia as well as the inheritance from the Soviet time. In the country there is an absence of democratic tradition, discredit of cooperation, and a lack of individual initiatives and entrepreneurship in agricultural business and in day-to-day life.

The analysis confirms the theoretical arguments about the importance of socio-psychological factors. The study shows a strong relationship especially between trust and the agricultural producers' propensity to participate in cooperative activities. A low level of trust in agricultural communities will impede the cooperative movement in Russia. The social and cultural mechanisms from the Soviet era reduce trust. Moreover, because the agricultural cooperatives are often initiated by the governmental and regional administration these organizations are characterized by bureaucracy. The degree of organizational bureaucratization has been shown to be negatively correlated with trust (Moorman, Deshpande, and Zaltman, 1993).

As North (1990) asserted, people's inclination to follow early framed models may explain hard "path – dependencies" in society's development. This study indicates a high degree of dependency on informal agricultural institutions from history. The logic of past social relationships defines the post reform development

of agricultural organizations. Conservatism and adherence to Soviet traditions hamper the development of cooperatives, and so does the discrimination of cooperatives during the 1990s.

Furthermore other factors are important for farmers' low propensity to be members of cooperatives. Readiness to be involved in transactions with cooperatives, attitude towards agricultural cooperatives and readiness to be involved in democratic management affect the propensity to join a cooperative. The Soviet forms of collective organization implied strict management hierarchies and low involvement by organizational members in decision making. Only few present and potential members are aware of democratic institutions in economic and social life. An indifferent attitude to individual and common needs puts authentic collective action out of reach. It leads to a disinclination of farmers to work cooperatively.

Low levels of trust and involvement combined with vaguely specified property rights in traditional cooperatives create agency problems and high transaction costs. The consequence of agency problems and huge financial risks in Russian agriculture is a shortage of capital and difficulties for members to invest in cooperatives. The existing informal institutions, high transaction costs and agency problems inhibit the establishment of new cooperatives.

Other circumstances that hamper the progress of cooperative business in the Russian agriculture are:

- the lack of savings and low income of members of cooperatives and agricultural producers;
- imperfection of credit markets and scanty opportunities for acquiring financial resources;
- the absence of secondary market for cooperative equity;
- specific cooperative legislation with restrictions for organizational innovation and new financial instruments;
- the deficiency of information about cooperatives;
- the shortage of professionals and leaders for cooperative business.

The investigation demonstrates that socio-psychological factors significantly influence farmers' propensity to be members of agricultural cooperatives. In spite of favorable political and economic conditions, the lack of trust and involvement among agricultural producers will impede any progress in agricultural cooperative development.

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