A New Phase of Post-Socialist Structural Changes in Russian Agriculture

YAMAMURA Rihito

Introduction

When discussing the post-socialist institutional changes in transition economies, agriculture can be treated as quite a distinctive sphere, to which the usual approaches and criteria for the transition to a market economy cannot be applied.

As a consequence of the structural reforms following the collapse of the socialist regimes, new farming structures have emerged, that are quite different from those established under market economies in other countries of the world. They are quite unique from a historical viewpoint in terms of agricultural development in the 20th century.

The aim of this paper is to examine changes in farming structure in the post-socialist Russia. The author will not attempt to give a comprehensive analysis of the current Russian agricultural structure. The discussion of this paper will be limited to selected aspects of this problem. In particular, we will focus on the changes in individual private farm sector. In recent years several new phenomena and unexpected dynamic changes have taken place in this sector, which so far has not yet been fully studied by specialists of the Russian agriculture. Discussion and analysis of these new changes will contribute to our understanding of the structural problems of agriculture in transition economies.

This paper is in two parts. In the first section we will take an overlook of the general trends in the post-socialist farming structures in transition economies. The following section deals with the Russian case and we will discuss the changes in individual private farm sector using the author's recent field-work materials and regional statistical surveys.

I. Post-Socialist Farming Structure in Comparative Perspective

Already, 10 years has passed since the beginning of the agricultural structural reforms in the post-socialist countries of Europe. As a consequence of the reforms, some fundamental changes have occurred in the structure of agriculture during this period, especially in the countries where agricultural production was fully collectivized under the socialist regime.

In this section, the author will attempt to give a general picture of post-socialist changes in the farming structure of these regions. The discussion of this paper will be focused on several important aspects of the problem from a comparative point of view. The points discussed here will give a base for further discussion and analysis in the following section, which will deals with the Russian case.

DIVERSITY OF POST-SOCIALIST FARMING

In many of the post-socialist countries of Europe, following the land reforms and transformation of socialist farms, there have emerged highly diverse farming structures. A large variety of different organizational forms of farming have developed, which are diverse both in economic and legal terms. These include various types of corporate farming – transformed cooperative farms, joint-stock companies or limited liability companies which were created following the privatization and transformation of socialist farms (collective farms and state farms). Along with corporate farms, various types of individual private farms have been created and developed. They are subsistent farming households including those that originated from the socialist subsidiary plots, middle-sized commercial family farms which have been created following the land reforms or by decollectivization of socialist farms, individual farms of "capitalist type" with many employees, and so on. Besides, there still exist unprivatized state farms in some countries. This high degree of diversity in farming organization is one of the distinctive characteristics of the agricultural structure in transition economies.

However, it is extremely difficult to get an exact picture of the diversified structure of farming in transition countries due to the lack of reliable and detailed statistical information. From statistics we can usually obtain the figures (number or share) of such categories like "cooperatives," "company farms," "individual private farms." Such classification is usually based on legal categories. Here one should be reminded that these legal categories do not always correspond to either the real economic or organizational characteristics.

A typical example of misleading farm categorization based on legal definitions can be seen in Russia. Following the reorganization of socialist farms in the early 1990s, there have emerged several categories of farms – joint-stock companies, limited liability companies, producer cooperatives, farms preserving old status of kolkhozes etc. Most of them have continued to function until now, although they have frequently altered their legal status following changes in legislation. It appears that farm diversification has taken place in Russia as a consequence of the policies conducted by the Russian reformist governments.

However, this was only a formal or "superficial" diversification. All of the above- mentioned categories of farms are the same in reality when judged on their socio-economic characteristics: irrespective of the different legal status, all of them are actually the same type of producer cooperatives, which still preserve the traditional traits of socialist collective farming in many important aspects.

Thus, when we discuss the diverse farming structure of transition economies, the most important aspects are the socio-economic status of the farms rather than their legal definitions or formal (official) categorization.

Another important aspect of post-socialist farming structure is the distribution of farm size. Connected with this, it should be pointed out that farm categories according to physical farm size are used in many academic works or reports written by specialists in post-socialist agriculture. The categorization of farms such as large-scale farms, middle-sized farms or small-scale farms, which are defined by physical scale criteria are most of-

ten used to characterize the dynamics of changing structure of farming.¹

This approach seems to have a historical root that originated from the 19th century's agrarian debate concerning the efficiency and viability of large-scale farms and small-scale farms. It is well known that the Russian agricultural economist Alexandr Chaianov criticized this approach in the 1920s. According to him, the problem should be addressed differently: the viability of capitalist farms based on hired labor and peasant farms based on family labor should be analyzed and compared instead of a comparison between large-scale farms and small scale-farms, which were usually categorized according to physical criteria (Chaianov 1923).

At least, it should be noted that the classification of farms by physical size can sometimes be very misleading and confusing, since farms with a different socio-economic status might be classified into the same category such as "large-scale farms" or "small-scale" farms.

Farming Structure as a Socialist Heritage

It has been sometimes argued by the specialists in socialist agriculture that in the period of collectivized socialist agriculture there existed a "dual structure" of farming. Workers on collectivized farms kept their own small plots and animals mostly for their own consumption. These types of farming activities were usually referred to as "subsidiary" private farming. In this sense, the kolkhoz-type of socialist farming was not purely "collective." It was rather a unique mixture of collective and individual farming, which were both mutually dependent on each other. In other words, the socialist collective farming system self-contained "dual structure" within itself.

This socialist heritage has not completely disappeared after the collapse of the socialist regimes in Europe. On the contrary, it still plays important social and economic roles in many postsocialist countries after the restitution processes, privatization

¹ One of the typical examples is the OECD's study on farming structure of the Central and East European countries (OECD 1996).

and transformation of socialist farms. Post-socialist corporate farms, which have been created from the socialist collective farms, usually keep their traditional self-contained dual structure even now. Moreover, most of the small independent farms, which sprang from the former socialist farms as a consequence of restitution or transformation, are, in essence, a continuation of the old socialist type of subsistence farming, although the average size of farm plots and average number of animals has been notably increased and their activities have become more independent.

In such countries like Russia, where no restitution of old ownership or liquidation of socialist farms have been implemented after the collapse of the old regime, the self-contained dual structure of collective farming still continues to be dominant.

Dual Structure of Individual Private Farming

In the Balkan countries like Bulgaria and Romania, following the land restitution and liquidation of socialist cooperatives, the share of individual private farming has strikingly increased. However, it would be too optimistic and simplistic if we attributed these change solely to the "successful" structural policies and reforms of agriculture in those countries. We should note that new farming structures in those countries were the results of uncontrolled and spontaneous processes rather than the results of well organized and carefully designed reform policies. Therefore, this process of decollectivization was usually accompanied with the destruction and the depletion of public assets and indispensable infrastructure both for agricultural and social activities.

Another important aspect of the spontaneous decollectivization processes was a recession to the dominance of subsistence farming instead of the development of modern types of commercial private farming. A strong and sustainable class of middle-size commercial family farms has not yet emerged in those countries.

On the other hand, a small number of large individual private farms based on hired labor and rented land is currently be-

ing dynamically developed. Some of them were originally established as family farms. However, by quickly enlarging their physical size, they have changed their socio-economic status towards a "capitalist-type" of farm, i.e. individually owned big estate farm with many employees.

Not only in the Balkans, but also in other post-socialist countries, where producer cooperatives or other types of corporate farming are still dominant or occupy a larger share, a similar "dual structure" of individual private farms is being developed, although the dynamism for this type of development is relatively weak.

In post-socialist countries, generally speaking, the most stagnant strata of individual private farms are middle-sized farms. This common phenomenon in transition economies is connected with the fact that the mechanisms of the creation and development of the classical type of family farms are very weak or completely absent. Moreover, since the short period (usually 2-3 years following the collapse of the socialist regimes) of active government support to newly created family farms has ended, the ruling political parties and the governments in most of the transition countries of Europe have become less interested in the development of a western type of family farming and pay little attention to existing family farms in their countries.

It is important to note that middle-sized family farms, in particular, require government supports and non-commercial alternative institutions for services such as credit, insurance, transactions and marketing activities (sales and product processing, purchasing of inputs), development of new technologies and so on.

First, unlike subsistence farms, commercial family farms need the above-mentioned activities, that cannot be efficiently implemented by farmers themselves, because many of these activities are under the economy-of-scale rule.

Second, unlike big estate farms or corporate farms, they need to be financially supported. In the post-socialist countries of Europe, a typical middle-sized family farm is mechanically equipped that requires financial resources for its initial investment. However, commercially-based institutions such as banks or private agri-business companies rarely take risks and provide family farms long-term credits at moderate interest rates. Therefore, without any special financial supporting system, middlesized family farms cannot be created and be developed.

Thus, alternative supporting institutions and various forms of vertical integration, including cooperatives that provide services and financial resources to farms, must be developed for the creation of a class of sustainable family farms.

With respect to the large-scale capitalist type farms, the author of this paper is rather skeptical about the long-term sustainability of this type of farming. Connected with this issue, we will attempt to analyze the conditions and factors underlying the development of capitalist tenant farming in Russia in the second section of this paper.

Post-Socialist Agricultural Producer Cooperatives

Post-socialist cooperative farms discussed here can theoretically be treated as producer cooperatives for agricultural production. Although there is no common understanding among specialists and scholars as regards the strict definition of producer cooperatives, they are usually considered to be labor-managed firms, in which workers voluntarily contribute their assets and their labor without the usual labor contracts for collective production activities.

Transformed cooperative farms, which were created from the collective farms following the collapse of the communist regimes, are different in character from the above-mentioned classical type of producer cooperatives for the following reasons.

First, very often their members include many landowners or cooperative assets share holders who do not contribute any labor. For example, in Slovakia about one third of the members of cooperative farms do not make any labor contribution, while about 60% of members do not provide any asset or land contribution (Wolz et al. 1998). In Bulgaria there were many absentee landowners among members of cooperative farms and they

had the same voting power as other members who contribute labor.² As a consequence of such a membership structure, the transformed cooperative farms have very often experienced serious conflicts of interest among different groups of members. This might be one of the most important factors that threaten the viability of cooperative farms.

Second, cooperative farms in transition countries are not, in a true sense, voluntary associations of members. Rather, they were established as the direct successors of the socialist collectivized farms, which were usually organized by forced collectivization. It is true that after the transformation of socialist collectives, new cooperative farms were reorganized voluntarily by their participants. However, this voluntary process was more or less a formal one, since the majority of workers in socialist collectives passively accepted being members of reorganized cooperatives taking into account the difficult socio-economic conditions and risks which they would face if they became independent from local collectives. The reorganized cooperatives completely lacked the elements of "communal" solidarity and enthusiasm among their members, which is one of the most important and essential aspects of voluntary associations.

Furthermore, many of the organizational features of socialist collective farming have been obstinately preserved in reorganized cooperatives. Opportunistic behavior by workers, shirking and free riding are still the most common phenomena as they were during the socialist period. Even now, the majority of reorganized cooperatives in the post-socialist countries seriously suffer from theft and misappropriation of resources by their members. All of the above-mentioned aspects substantially decrease organizational efficiency and viability of cooperative farms in transition countries.

At the same time, the reorganized post-socialist farms also have the classical problems associated with cooperatives. Usu-

² In 1999 a new law on cooperatives was adopted in Bulgaria. According the new law, any agricultural producer cooperative must enter into a land lease contract with landowners and absentee landowners cannot be cooperative members.

ally the "one member – one vote" principle, which is known as one of main classical features of cooperatives, is used for the most important decision making in the post-socialist cooperative farms. Many leaders of cooperative farms in transition economies feel that this cooperative principle is burdensome for more efficient management. It often hampers the necessary process of restructuring and quick adaptation to changing circumstances and conditions of market economies. It forces the management of cooperatives to be more "member-oriented." Actually, many empirical studies have shown that the majority of existing cooperative farms are more "member-oriented" than "market-oriented" and do not function efficiently under the conditions of the new market economy in transition countries.

The Second Transformation of Cooperative Farms

In the Central and East European countries, where transformed producer cooperatives had occupied the overwhelming portion of farmland after the restitution and reorganization of socialist farms had been implemented, a new process of transformation of cooperatives into other types of business entities is now ongoing. In the Czech Republic, Slovakia, Hungary and the former GDR cooperative farms have notably decreased their numbers and there share in the total farmland area, while other business entities have enhanced their positions significantly. This process is sometimes termed the "second transformation" or "second privatization" of the post-socialist cooperatives.

The factors that have facilitated such processes are different between countries. In countries like the former GDR and Hungary, where farms have to face severe market competition, it seems that cooperative farms simply follow Oppenheimer's "Law of transformation" (Schmitt 1993; Wolz et al. 1998). That is, under the conditions of the market economy, the lack of competitiveness due to the organizational inefficiency of cooperatives goads their managers to switch over to other types of farming organization for survival. Usually they try to maneuver the necessary resources for production by transferring them from

cooperatives to separately created business entities (new company farms) leaving behind cooperatives "inefficient" assets and accumulated debts. Cooperative workers are hired by new companies and cooperatives turn into "empty shells." This process can be characterized as the concentration of property rights into the hands of owner-managers that turns former cooperative members into hired employees.

In countries like the Czech Republic and Slovakia, the "second transformation" process may be better explained by the legal backgrounds rather than market factors. According to the Transformation Law, which was adopted in 1992 by the Czechoslovak Parliament, a substantial part of cooperative assets have been restituted to non-member owners and held by them in the form of capital shares. Cooperatives were allowed by law to use these restituted production assets freely for 7 years after which they must be returned to the owners. It was clear that the cooperatives' existence would be seriously threatened, if they actually had to settle this "transformation debt" with owner-claimants. Thus, cooperative managers tried to save the necessary production assets by transferring them to other business entities.

In Slovakia, thanks to the amendments of the Transformation Law in 1995, cooperatives could convert non-members' capital shares to equity bonds issued by them. In this way the Slovak cooperatives were released from the burden of "transformation debt." However, the process of the "second transformation" is still going on in Slovakia. The reason is that since the middle of the 1990s liabilities of cooperatives have significantly increased due to poor economic performance. Having been threatened by bankruptcy, cooperative managers were forced to transfer assets to other business entities.

In Russia and the former Soviet republics, the above mentioned process of second transformation has not yet been widely observed with the exception of the case of Kazakhstan, where a similar process has developed among grain producing farms since 1997. Like in Slovakia, the massive liabilities of cooperatives with bad financial performance and forced bankruptcy procedures have prompted the second transformation process in Ka-

zakhstan. Consequently, many of the former cooperative farms have turned into managers-owned company farms or subsidiary farms owned by grain companies.

II. STRUCTURAL CHANGES IN RUSSIAN PRIVATE FARMING

In this section the author will examine some important aspects of post-socialist structural changes in Russia. The focus will especially be on the problem of the individual private farming.³ Other important aspects such as the re-transformation of agricultural enterprises will not be discussed here, as dynamic changes related to these aspects have not yet been widely observed in Russia with the exception of the experiments in several regions.⁴

Post-Soviet Individual Private Farms - Definitions and Classification

Individual private farms in Russia are divided into several categories by official statistics. The first category is "individual subsidiary farming" (subsistent farming of villagers). The second category is "peasant farm" (*krest'ianskoe khoziaistvo*), that includes officially registered autonomous market-oriented farming by individuals. The number of individual subsidiary farms

³ Discussion and analysis here is based on the author's recent field work, which was implemented in the West Siberia and the Black Earth Zone in the years 2000 and 2001.

⁴ The most famous experiment was the one that was conducted in Nizhegorod Province. The Nizhegorod experiment is analyzed in detail in my book concerning the post-socialist agricultural reform in Russia (Yamamura 1997). See also the materials published by the Nizhegorod regional administration and the group of agricultural economist from the Russian academy of agricultural sciences (*Agrarnaia reforma v Nizhegorodskoi oblasti*, Nizhnii Novgorod: Departament sel'skogo khoziaistva i zemel'noi reformy, 1996; *Ekonomicheskie i sotsial'nye posledstviia reformirovaniia sel'khozpredpriiatii po Nizhegorodskoi modeli*, Moskva: Agrarnyi Institut, 1996).

is about 16 million and they use 3% of the country's agricultural land. About 260 thousand "peasant farms" are registered in Russia and they officially account for about 7% of the total agricultural land. Besides these, part-time farming by city dwellers accounts for 2-2.5% of the total agricultural land use.

Thus, in terms of the share of land, the individual private farming sector plays a relatively minor role in Russian agriculture. However, in terms of agricultural production, individual private farming has a substantial share and even plays a more important role than agricultural enterprises. The bulk of vegetables and potatoes are now produced in various types of small plots owned by villagers and city dwellers. More than a half of animal production comes from subsistence farming by villagers. The proportion of agricultural production by private farms has drastically increased in the last 10 years. Even in the production of such commodities like grain and sunflowers, which are considered suitable for large-scale farming by agricultural enterprises, peasant farms have now increased their share to the level of 10-15%.

The increased production trends within the individual private farming sector have sometimes been interpreted by reformoriented agricultural economists in Russia as a positive result of land reform conducted following the collapse of the Soviet Union. However, it should be noted that these changes have been brought about mainly by passive adaptation behavior for survival by individuals and agricultural enterprises under economic crisis. People, faced with a drastic decline in real income, were forced to develop their subsistent and part-time farming for their own consumption. The land reform has only facilitated this adaptation process, giving people ownership of their plots and the possibility of acquiring additional land.

It is too early to say whether this trend of declining production share of the agricultural enterprises (the successors of kolkhozes and sovkhozes) and the enhancement of individual private farming reflects an inevitable path for future development of Russian agriculture.

In relation to this, we should draw attention to the most recent statistical figures. First, it appears that village subsistence

farming has ceased to expand, having already exhausted its potential development.⁵ Secondly, the number of registered peasant farms reached its peak several years ago and it has been declining gradually in recent years (Table 1). In short, the individual private farming sector in Russia seems to have entered a slow-growth or stagnation period. On the other hand, the average profitability of agricultural enterprises has improved in the recent 2-3 years and the declining process of agricultural activities by them has also notably slowed down.

One might say that the period of adaptation enforced by the economic crisis has finished due to the improvement of macroeconomic conditions for agriculture following the 1998 financial crisis and the devaluation of ruble.

STATISTICAL ANALYSIS OF PEASANT FARMS

While the individual private sector in Russian agriculture as a whole seems to have entered an almost stagnant stage, the structure within the sector has been changing more dynamically. The recent dynamic changes in the structure of the individual private sector can be seen from the official statistics.

Tables 1 and 2 show the time series of the registered number and the average land size of peasant farms in Russia. The registered number of farms reached its peak in 1996 and then started to decline. Compared to the level in 1996, the registered number of farms has decreased by more than 7% over 4 years. The degree of decline varies substantially between regions (economic districts) of the Russian Federation. In some regions the registered number of farms has declined by 17-18%.

On the other hand, the average size of peasant farms has notably increased. For the period 1992-1997, the average size

⁵ According the official statistical data by the *Goskomstat* of the Russian Federation, the average size of private subsidiary farming by villagers has remarkably increased during the first half of the 1990s, after which the growth of the private subsidiary farming has almost stopped and several indicators such as the average number of cattle held by a village family started to decrease (Goskomstat 2000). The meaning of this phenomenon is discussed in the chapter 8 of the book by the author (Yamamura 1997).

was 42-44 ha and this level was very stable until 1997. Since 1997 the average land size of peasant farms started to increase. For 4 years it increased to the level of 55ha. The rate of increase also varies between regions. In the North Caucasus, the West Siberia and the Central Black Earth Zone the average size of peasant farm increased by more than 50% for the same period. In regions, where food grain production is traditionally developed, the rate of increase was higher than in other regions.

We must examine the size structure of peasant farms in order to understand the above-mentioned phenomenon. Table 3 shows the size structure of the peasant farms in Novosibirsk province in Western Siberia, where the most dynamic changes were observed. The overwhelming majority of the active peasant farms in the region specialize in food grain production (almost 90% of the sown area by the peasant farms is devoted to grain production). So we can use the land size structure as an indicator that reflects the true picture of structural changes in peasant farms.

From the data we can point out that the following changes in the peasant farm sector have taken place recently.

Declining Trend in the Middle-sized Peasant Farms

Among the peasant farms created in the post-socialist period in Russia, farms with 10-100 ha of agricultural land are the most common. They are usually typical family farms in the classical sense. We call this group the "middle" stratum of peasant farms. However, it should be noted that peasant farms from this stratum have been very often organized into informal groups, which usually consist of 2-6 families and comprise hundreds of hectares of arable land. So this "middle" stratum of peasant farms does not simply mean that farms from this stratum actually function as autonomous middle-sized family farms in the usual sense.

From the Table 3 we can see that the previously described declining trend in the peasant farm sector can be observed in this stratum. Here we must take into consideration the fact that there is a big difference between the officially registered number of peasant farms and the number of actually operating farms.

Especially in the middle stratum one can find many farms that do not operate at all or have already ceased to exist without any official liquidation procedure. So the declining trend in this stratum is actually stronger than the statistical figures indicate, although we cannot have an exact figure due to the lack of data.

Dynamic Development of Farms in the Upper Stratum

It is clear from the Table 3 that quite the opposite trend has occurred in the upper stratum of farms. The number of farms with more than 100 ha of land has increased strikingly in the last 4 years. Among them farms with more than 200 ha have almost doubled their number and they now account for 55% of the total land of peasant farms in the region.

Unfortunately from this table we cannot confirm the actual process more precisely, because the table does not have separate figures for the largest farms with 500-2000 ha of land. The author of this paper observed that in various regions of Russia in the last 3-4 years, land has been concentrated very rapidly into the hands of the largest individual private farms and that there have emerged farms with 1000-2000 ha or more. The very high percentage of land concentration in the upper stratum of farms (55% in Novosibirsk region, 42% in the Russian Federation) is explained by the emergence of large-scale "peasant" farms.

Some Important Aspects of Structural Changes in Peasant Farming

Resource Problems for Peasant Farms

Most of the peasant farms, which are already operating now, have suffered from disequilibrium among three main resources: labor, land and capital. In particular, for those farmers, who specialize in grain production, the deficit of capital for given land and labor resources from their families, or the deficit of land for given capital and labor resources has been a serious source of problem.

Peasant farms, usually created as typical family farms, mainly relying on labor resources from their families, have to ac-

quire the necessary land and capital resources. For example, if peasant farmers are grain producers, they usually have to be equipped with the machinery including tractors with 70-80 horse powers such as "Belarus" or DT-75 and grain combines like "Niva" or "Yenisei." It has been very difficult for these farmers to acquire the necessary machines except during the period 1991-1992 when financial support from the Federal Government was available to the peasant farmers.

It was relatively easy for them to acquire the initial farmland from the district land reserves or using the land shares of their family members in the local agricultural cooperatives. However, after the land from the local reserves had been redistributed between newly created peasant farms, it became practically impossible for them to enlarge their size by acquiring additional land resources. Even if farmers succeeded in acquiring necessary machines, they could not use them to maximum efficiency because the amount of land initially given to them was limited and fixed and farmers could not freely expand their farm size by land purchase or leasing. Land leasing transactions started to be practiced by farmers only after Yeltsin's decree in March 1996 concerning citizens' constitutional land rights⁶ was implemented, while the buying and selling of agricultural land is still strictly restricted.

Informal Grouping as a Solution of Resource Problems

In order to solve the above described resource problems, many registered peasant farms have been organized into informal groups, which usually consist of between 2-6 families (officially they are separately registered peasant farmers). This phenomenon has been popular, especially in grain producing regions. Parcels of land and machines used by these informal groups of families are usually owned by families separately, although there are cases when a part of the machinery and farm assets are jointly-owned by families. Usually they work togeth-

⁶ Ukaz Prezidenta Rossiiskoi Federatsii N 337 (7 marta 1996), O realizatsii konstitutsionnykh prav grazhdan na zemliu (Guarantee of citizens' constitutional rights on land).

er distributing tasks and functions among themselves, dividing their products after the harvest.

However, these informal groups are very unstable. Usually they get dissolved after 1-2 years operation or they change their members very frequently. For example, in Tambov province of the Central Black Earth Zone, 88% of registered peasant farms were organized into informal groups according to the survey conducted in 1994 (Sazonov 1995). When I visited the province in 2000, I was informed that the percentage of grouping is still high – more than 60%. At the same time, each year more than 80% of these groups change their members or cease their operation altogether.

This instability of informal groups might be one of the reasons that explain the above-mentioned declining trend in the middle stratum of registered peasant farms.

Leasing of Land to Solve the Land Deficit

Peasant farms or informal groups of families, which are equipped with machines, have been faced with a "deficit of land." Table 4 shows the situation in the above-mentioned Tambov province in 1993. According to the survey organized by the author of this paper, 61% of peasant farms replied that they needed additional land. We must take into consideration the fact that most of them were organized into informal groups, which enabled farmers to use jointly more than 100-200 ha of arable land. However, they still needed additional land, the average size of which was more than 50% of the already utilized land.

If there existed a market for agricultural land in each region of Russia, demand for additional land might have been satisfied through leasing contracts or purchasing from landowners. As already mentioned, in Russia the buying and selling of agricultural land has been prohibited. Moreover, until 1996-1997 it was very difficult or practically impossible to lease land from villagers who formally owned their share of land as members (including pensioners or workers in social spheres) of the successor farms of kolkhozes and sovkhozes.

That is why the average land size of registered peasant farms was very stable during the period 1992-1997 (see Table 2). The

situation has changed following the Yeltsin's decree in March 1996. Since then, successful grain producing peasant farms fully equipped with machines could have increased their farm size and production using land-leasing arrangements.

Emergence of "Capitalist" Type of Individual Private Farms

It should be noted that the aforementioned enlargement of peasant farms is not limited to a process for solving a resource disequilibria.

Table 5 shows the result of a sampling survey that was conducted in July 2000 from 15% of registered peasant farms in the Novosibirsk province. "Large-scale farms" in the table are registered peasant farms with land of more than 500 ha (34 farms from a total of 687 samples). "Small- and medium-sized farms" in the table are peasant farms with land less than 500 ha (653 farms).

As shown in the table, small- and medium-sized farms are typical family farms, the main labor resources of which are family members. Large-scale farms are characterized by two different labor resource aspects:

First, the average number of family members, who work on the farms, is almost twice as large as the small- and mediumsized farms. This means that this category of peasant farms include farms owned by large families. In this sense, the emergence of "large-scale" peasant farming can be interpreted as the result of the "demographic differentiation" of family farms.

Second, large-scale farms use hired employees, which on average account for more than 50% of labor resources. It is clear that this category of "large-scale peasant farms" includes farms that are not the classical type of family farms, but farms of the "capitalist" type using Chaianov's terminology.

Thus, the recent development of farms in the upper stratum can be considered a combination of two processes i.e. the demographic differentiation and the emergence of capitalist farms.

Factors Underlying the Development of "Capitalist" Type of Farming

Property Rights on Agricultural Land

First of all, it must be pointed out that the Presidential decree in March 1996 became the turning point for the new development. It was issued with the intent to clarify and strengthen the property rights on agricultural land, which had been formally given to villagers as members (including pensioners or workers in social spheres) of successor farms of kolkhozes and sovkhozes in the form of property rights of individual shares from commonly used agricultural land.

According to the decree, agricultural farms must form written contracts with landowners. Moreover, the decree gave landowners the right to separate their shares of land from commonly used land in agricultural enterprises and lease them to other agricultural producers.

Although the decree was considered a temporary one until a new Federal Land Code would be adopted, it had a strong impact on the emergence of large-scale tenant farms among peasant farmers.

Situation of Land Market in Villages and Low Cost on Land

Table 5 shows that the percentage of rent in the total cost of production for large-scale tenant farms is very low. Landowners in villages who agree to lease their land to private tenant farms are usually pensioners or workers in the social sphere. They usually accept a very low level of rent (including in-kind payments and various additional services given to them) when they make leasing contracts with tenant farmers, because they cannot expect to receive any payment from agricultural enterprises, which are in poor financial situations. At most, the average agricultural enterprises in villages can afford to pay land tax instead of landowners and give some services that were traditionally provided for maintaining individual subsidiary farming.

Thus, today land resource constraint is not the main problem preventing large-scale peasant farms from developing.

Hired Labor Resources for Farming

One important condition that enables large-scale peasant farms to develop and enlarge their production is the existence of relatively cheap labor resources in villages. They are usually supplied from agricultural enterprises in the same local areas. Many skilled workers like tractor drivers, machine operators are now ready to work for developing large-scale tenant farms with relatively low wages, when agricultural enterprises cannot afford to pay them any wages.

That is why capitalist type tenant farms have been very quickly developing in villages where the existing agricultural enterprises are very weak and their financial performance is very poor.

Capital Constraints

As described above, land and labor resources are not serious problems now for emerging large-scale tenant farms. So the main constraint to their developments is a lack of capital resources. In Russia there are no financial systems for supporting the creation and development of new peasant farms. In this situation, only a small number of peasant farms which were lucky enough to have benefited from financial aids in 1991-1992 or who managed to get illegally equipped using their influential position as local village leaders (as in the cases of farms by former managers of agricultural enterprises etc.).

Even for successful peasant farms, this capital constraint is crucial for their development, because they can only use their own financial resources.

Therefore, the most of successful peasant farms engage only in grain production that will give them profit and will enable them to enlarge their farm size without huge additional investment.

CONCLUSIONS AND REMARKS

As one of the general trends in post-socialist agriculture, the dual structure of individual private farming is observed in Russia like in other Central-Eastern European countries. Although in the first reformist policy for agricultural restructuring preference was given to the development of middle-sized family farms, now the middle stratum of peasant farms are declining in Russia. On the contrary, the "capitalist way of development" of individual farming is quite striking in the case of Russia.

As mentioned in the first part of this paper that discusses the problem of the dual structure of individual private farming in post-socialist countries, the author is rather skeptical about the long-run sustainability of these fast developing capitalist type tenant farms.

In this connection, the author has attempted to analyze in the second section of this paper the conditions and factors underlying the development of the Russian capitalist tenant farming.

The analysis shows that their dynamic development is based on specific conditions which are characteristic of transition economies: 1) relatively low levels of rent for agricultural land due to widespread fragmented landownership by pensioners, workers in the social sphere etc. on one side and very low profitability and a bad financial situation of agricultural enterprises on the other side; 2) the abundance of relatively cheap labor that are supplied from declining agricultural enterprises; 3) relatively profitable prices for grain, in the production of which these farms are highly specialized. They are very strongly profit-oriented, prefer to take a short-time strategy, sometimes violating technological requirements and ignoring practices such as rational crop rotation etc.

Nevertheless, unlike middle-sized family farms, which require various institutional arrangements to support them, one would expect that the development of capitalist farming will continue in Russia and become one of unique elements of the Russian agricultural structure, that will continue to be quite different from those in other part of the world.

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Table 1.

Number of Registered Peasant Farms (at beginning of each year)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	Growth rate (2000/1996)
Russian Federation	49.0	182.8	270.0	279.2	280.1	278.6	274.3	270.2	261.1	-7%
Northern District	1.32	3.60	4.47	4.59	4.14	4.15	4.00	3.80	3.64	-12%
North-West District	2.36	10.23	11.47	11.47	11.67	11.78	11.66	11.17	10.51	-10%
Central District	5.90	21.35	28.99	30.60	30.26	30.03	29.56	28.46	27.92	-8%
Volga-Viatka	1.78	5.76	8.18	8.70	8.90	8.74	8.90	8.69	8.74	-2%
Central Black Earth	2.37	10.60	14.26	12.92	12.46	11.69	11.34	10.94	10.98	-12%
Volga (Povolzh'e)	5.93	27.38	37.40	36.62	35.81	35.36	34.80	34.23	33.86	-5%
North Caucasus	9.14	40.59	67.82	73.46	79.19	84.07	84.95	85.18	79.78	1%
Ural	6.45	23.11	33.96	34.24	32.80	31.33	29.94	29.17	28.87	-12%
West Siberia	6.13	20.05	31.04	31.82	30.38	28.53	27.16	26.46	25.29	-17%
East Siberia	2.43	9.46	15.32	17.14	17.42	16.14	15.75	14.93	14.33	-18%
Far East	4.82	11.96	15.78	14.54	13.54	12.72	11.93	11.49	11.24	-17%

Table 2.

Average Land Size of Peasant Farms (at beginning of each year)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	Growth rate (2000/1996)
Russian Federation	42	43	42	43	43	44	48	51	55	28%
Northern District	_	-	-	22	22	22	26	30	30	36%
North-West District	_	-	-	14	14	15	16	18	18	29%
Central District	_	_	-	27	26	26	28	29	29	12%
Volga-Viatka	_	-	-	25	26	27	29	32	33	27%
Central Black Earth	_	-	-	41	41	43	47	54	63	54%
Volga (Povolzh'e)	_	-	-	86	90	91	96	105	113	26%
North Caucasus	_	-	-	20	20	21	25	26	30	50%
Ural	_	-	-	48	49	50	53	58	60	22%
West Siberia	_	-	-	64	69	79	91	103	109	58%
East Siberia	-	-	-	59	60	62	64	63	65	8%
Far East	-	-	-	47	44	45	47	50	50	14%

Sources: Sel'skokhoziaistvennaia deiatel'nost' krest'ianskikh (fermerskikh) khoziaistv v Rossii (Moskva: Goskomstat Rossii, 2000), pp. 49-52; Itogi khoziaistvennoi deiatel'nosti krest'ianskikh (fermerskikh) khoziaistv Rossiiskoi Federatsii v 1995 godu (Moskva: Goskomstat Rossii, 1996), pp. 10-12.

Table 3. Distribution of Peasant Farms by Land Size (%)

(1) Percentage Share of the Number of Peasant Farms (%) (at beginning of each year)

Land Size		Nov P	Russian Federation			
	1996	1997	1998	1999	2000	2000
-5 ha	1.5	1.6	1.7	2.1	2.6	24.1
6-10 ha	7.9	7	6.3	6.2	5.7	14.5
11-20 ha	15.4	14.8	13.8	14.9	13.5	17.3
21-50 ha	33.5	34.2	33.2	33.1	31.2	20.0
51-70 ha	12.1	13.5	14.5	11.4	12.1	6.6
71-100 ha	13.8	12.5	11.4	11.8	12.8	5.9
101-200 ha	13.4	13.5	15.4	16.1	16.8	7.1
201 ha-	2.4	2.9	3.7	4.4	5.3	4.5

(2) Percentage Share of the Land of Peasant Farms (%)

Land Size		No ^o P	Russian Federation			
	1996	1997	1998	1999	2000	2000
-3 ha 4-10 ha 11-20 ha	n.a. n.a. n.a.	n.a. n.a. n.a.	n.a. n.a. n.a.	n.a. n.a. n.a.	0.0 0.4 1.4	0.6 2.8 5.3
21-70 ha 71-100 ha 101-200 ha	n.a. n.a. n.a.	n.a. n.a. n.a.	n.a. n.a. n.a.	n.a. n.a. n.a.	12.6 9.1 21.4	21.1 9.4 19.2
201 ha-	n.a.	n.a.	n.a.	n.a.	55.1	41.6

Sources: 1) Osnovnye pokazateli razvitiia krest'ianskikh khoziaistv Novosibirskoi oblasti v 1999 godu (Novosibirsk: Novosibirskii oblastnoi komitet gosudarstvennoi statistiki, 2000), pp. 6, 36.

2) Sel'skokhoziaistvennaia deiatel'nost' krest'ianskikh (fermerskikh) khoziaistv v Rossii (Moskva: Goskomstat Rossii, 2000), p. 14.

Table 4. Distribution of Peasant Farms by Demand on Additional Land (Tambov Province, 1993)

Land Size of		Demand on Additional Land								
Peasant Farms	0	1-20 ha	21-40 ha	41-60 ha	61-100 ha	101 ha-				
• `20 ha	4		3							
21• `40 ha	7	4	15			1				
41• `60 ha	23	8	5	12						
61• `80 ha	1	3	8		1	1				
81• `100 ha	4									
Total	39	15	31	12	1	2				
Percentage	39%	15%	31%	12%	1%	2%				

Sources: A survey done by the author.

Table 5.
Comparison of Large-scale and Small/Medium-sized Peasant Farms

	N.T.	•1 •	1 D	•	Δx_{e}	rage
		osibirs	Average in Russian			
	Large	e-scale	Small/	medium		ration
	1998	1999	1998	1999	1998	1999
Land						
total land on average (ha)	958	1017	78.9	80.1	51	55
of which 1) leased land	699	745	33.8	35.2	20	23
2) owned land	114	128	34.9	35.1	22	23
3)possessed land	145	145	10.3	9.8	8	9
agricultural (ha)	829	886	72.1	73.5	48	52
average rent for land (thous.rbl/farm)	3.8	6.0	0.3	0.5	0.6	0.9
share of rent in total cost (%)	1.6%	1.7%	1.0%	1.4%	2%	2%
Labor Resources						
registered members (persons/farm)	3.7	3.8	1.9	1.9	2.3	2.4
of which: full time working for farms	2.2	2.3	1.1	1.1		
hired employees	3.3	3.6	0.4	0.4	1.2	1.3
annual work hours by family members	755	846	277	293	285	312
annual work hours by hired employees		854	7.7	9.4	32	39
Number of Machines						
tractors	3.56	3.68	0.91	0.92	0.73	0.76
grain combines	2.19	2.12	0.33	0.33	0.27	0.28
trucks	1.69	1.65	0.40	0.40	0.35	0.36
Education Level of Farmers						
secondary		29%		44%		43%
secondary / specialized		26%		28%		37%
higher		41%		21%		20%
Main Products						
animal products		8.8%		6.9%	1	5.4%
grain		91.2%		78.4%		54.1%
other crops		0%		13.1%		20.5%
Non-agricultural Activities						
farms with processing		15%		2%		4.2%
farms with trading		26%		$\frac{2}{4}\%$		8.5%
Financial Indicator		, -		, 5		
percentage of profitable farms	44%	74%	25%	33%	34%	41%

Source: *Osnovnye pokazateli razvitiia krest'ianskikh khoziaistv Novosibir-skoi oblasti v 1999 godu* (Novosibirsk: Novosibirskii oblastnoi komitet gosudarstvennoi statistiki, 2000), pp. 13, 36-53.

YAMAMURA Rihito