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RUSSIA

LAND REFORM AND FARM RESTRUCTURING IN RUSSIA:
1992 STATUS*

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and
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July 1993

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EXECUTIVE SUMMARY

This paper reports results of land reform and farm restructuring in Russia as of the end of 1992, based on a survey in five oblasts of three groups: managers of collective enterprises (260), heads of households among employees of collective enterprises (1,487), and private farmers (984). After a review of the legal bases, the processes, and statistical and other evidence of changes and lack thereof in various agricultural sectors, the authors present the following conclusions (pages 13-14).

During 1992 two pivotal developments with regard to land tenure were accomplished in Russia. Land shifted from state ownership into mainly collective ownership. The theoretical right of individual members to exit with a share of land, earlier affirmed by law, was reinforced by the process of farm enterprise restructuring, which involved issuance of land shares in some form on most collectives.

Yet despite these developments Russian agriculture was, at the end of 1992, still overwhelmingly collective. The new collective enterprises of various forms look and behave much as did their predecessors, the state and collective farms. Managers of the new joint stock companies, limited liability partnerships, and various other collective enterprises show little indication that they must or may operate differently than they did in the past. Few intend to reduce their work force or shift specialization toward more profitable activities. There is no indication that internal incentive systems will change to pay factors of production, particularly land and labor, economically efficient rewards, i.e., their marginal contribution to earnings. Farm-enterprise employees still have a traditional view of their role within the collective, and derive their livelihood from wage work supplemented by income from the small household plots.

The developments in 1992 took place at a time when continued subsidies, cheap credit, and the absence of effective bankruptcy legislation allowed farms to retain the labor force they had prior to restructuring and to preserve their traditional attitudes. If a macroeconomic stabilization program is implemented in 1993, interest rates will rise, grain prices will rise, energy prices will rise again, and subsidies will be drastically cut. Under
these circumstances, many collective enterprises will be unable to meet payrolls for several months at least. As earnings in the collective sector fall, more families will find it in their interest to take land and asset shares and leave. As the number of households leaving with land increases, those who remain are likely to protect their access to average quality land by having it identified before much land is removed. Rather early in the process, therefore, it is likely that a number of farms will reconvene general meetings and vote to re-register as associations of peasant farms, with identification of individual land shares.

If a stabilization program is implemented and if the new land legislation stipulating that land shares are demarcated only upon exit from the collective is passed, the Russian agriculture sector is likely to undergo a rapid restructuring more fundamental than that in 1992. The result of such a restructuring would be large scale transfer of land from collective to individual ownership, and a proliferation of private family farms and voluntary producers' cooperatives along the lines of associations of peasant farms.
During the course of 1992, land reform and reorganization of farm enterprises in Russia brought about major changes in the ownership of agricultural land and in the rights of farm employees. Farms were required to re-register by the end of 1992 in one of legally recognized forms of organization and in the process to specify the ownership of their land as state, collective, or individual. Individual members were permitted to leave the collective with their share of land and assets and start a private farm.

The present study reports on the implementation of the land reform and restructuring process at the farm level and examines its implications for the performance of the agricultural sector. It is based on a survey conducted by the Agrarian Institute of the Russian Agricultural Academy of Sciences in five provinces during November-December, 1992. Pskov, Orel, Rostov, Saratov, and Novosibirsk provinces were chosen to capture a range of agroclimatic conditions and specialization. Three groups of economically active agents were surveyed: managers of collective farm enterprises (260 interviews), heads of households among employees of collective enterprises (1487), and private farmers (984). In total, 2731 interviews were conducted. The information from the surveys was supplemented by information from land committees, statistical organs, and district and village councils.

The collective enterprises in the sample have on average 8000 ha of land, of which 5000 ha are arable, and just over 300 full time employees. Most enterprises are diversified, depending on crop products (mainly grain) for over half of their gross output and livestock for about 40%. Farms with high, average, and low performance indicators were intentionally included in the sample. Table 1 presents the average holdings of various farm categories in the survey.

**LEGAL FRAMEWORK FOR LAND REFORM**

Approximately thirty legal documents, most enacted between 1990 and 1992, form the basis for Russian land relations. The legal framework of land reform addresses two major issues: (a) ownership and (b) distribution of land.

*Ownership.* While previously all land in Russia was owned by the state, current legislation additionally recognizes collective and individual land ownership. Under collective ownership, a legally constituted collective is the owner, and the land is used
by an enterprise operated by the collective. Collective ownership can be "undivided" 
(obshchaya sovmestnaya sobstvennost'), in which case individual shares of the members need not be defined, or "shared" (obshchaya dolevaya sobstvennost'), when shares are distributed to individuals, but specific tracts of land are not necessarily identified.

Current land legislation significantly circumscribes the rights of owners in three important areas: land holding, use, and transfer. The law establishes upper limits on the size of holdings to which individuals are entitled without payment. These limits vary by district according to the land-to-labor ratios in agriculture. Ownership of agricultural land carries the obligation to farm the land. Agricultural land that is not used for farming can be confiscated. Most farm land (with the exception of about 3% used for subsidiary household farming and residential housing) cannot be sold freely for ten years. During this moratorium, land can be sold only to the local council at administratively determined (normative) prices. These restrictions on transactions effectively remove most agricultural land from markets until approximately 2002.

**Distribution.** The Land Code stipulates that land is to be distributed without payment and in equal amounts to all workers in state and collective farms. Pensioners are included in the distribution, while the employees of social services may be included at the discretion of the collective. People not eligible for free distribution of land may apply to purchase land from the local authorities.

The broad base of eligible participants in land distribution reduces the individual share. The size of the land share is important if the recipient chooses in the future to withdraw from collective ownership and start a private farm. According to the draft new land legislation, a recipient of a land share would be assigned an actual piece of land only upon leaving the collective enterprise, so that consolidation of shares prior to leaving would presumably not be possible. This feature of the draft legislation, if retained, is likely to catalyze the next stage of farm restructuring. If even a few members seek to have their land identified, all members are likely to choose identification in order not to be left with residual inferior holdings. The process of identifying all holdings would necessarily convert the remaining collective producers into an association of peasant farms, each with land registered under individual ownership. The pace of formal creation of peasant farms could thus greatly accelerate.
LEGAL FRAMEWORK FOR FARM RESTRUCTURING

State and collective farms were required to re-register by the end of 1992 in one of the legal forms of organization as a prerequisite for the transfer of land ownership from the state to the collective. The main options for re-registration included:

- A collective farm with a revised charter.
- A state farm with ownership of non-land assets transferred from the state to the enterprise.
- A limited liability partnership (tovarishchestvo), where the land and asset shares of the founders are pooled and all or some of the founders work on the farm.
- A joint stock company: this form is similar to the limited liability partnership, except that stock certificates are issued to owners according to the value of their land and asset shares.

All these forms are collective enterprises. Individuals leaving the collective enterprise with their land and asset shares have the option of registering as peasant farms. A peasant farm is based on privately owned or leased land and privately owned assets. Usually one family owns and operates the farm, but multiple family farms exist.

Registered private farmers are permitted to form an association of peasant farms—another form of a collective enterprise in which the members in theory own their land and assets. In some cases, collective or state farms re-register as associations of peasant farmers without actually going through the process of physically dividing all land and assets and registering their members as new private farmers.

An important issue in the restructuring of farm enterprise is the disposition of responsibility for social assets and services. Legislation provides for the transfer of the public services to the local council, which is expected to use its share of taxes to budget and maintain the services. Many farm enterprises, however, prefer to keep the responsibility for the social services even after restructuring.

IMPLEMENTATION OF THE REFORM PROCESS

In aggregate, 77% of all farm enterprises in Russia had re-registered by January 1, 1993. The rate was slightly higher for collective farms (82%) and lower for state farms (73%). The state thus ceased to be the dominant owner of agricultural land in Russia, and most agricultural land moved into collective ownership.
The change of land ownership, however, does not imply privatization of agricultural production. Despite re-registration, the agricultural sector in Russia is still predominantly collective (Fig. 1). On January 1, 1993, 90% of agricultural land was still registered in the collective sector and only 10% was in the private sector, with less than half of this (3.9% by area) in private family farms formed as a result of the new legislation since 1991. Most of the remaining land in the private sector was in subsidiary household plots of collective farm members, which in 1992 increased almost 60% in aggregate through redistribution of land from collective farms.

Aggregate data indicate a very strong tendency of farms to re-register as whole units in collectives. About 42% of collective farms and 28% of state farms re-registered in their former status. The most common form chosen by re-organizing farms was the limited liability partnership (tovarishchestvo, 43% of new registrations). The association of private farms is the least familiar collective form, and very few chose it: there were only 748 registered associations. Moreover, in only 268 of these were the members in fact separately registered as private farms. The structure of farm enterprises in Russia at the beginning of 1993 consisted overall of 27% collective farms, 22% state farms, 32% limited liability partnerships, and about 20% in other collective forms (Fig. 2).

The number of private farms in January 1993 had reached 184 thousand. This is equivalent to approximately 7 private farms per collective enterprise, a significant change from one year ago, when the aggregate ratio of private farms to collective enterprises was less than two to one. Private farms are not equally distributed geographically, and in some communities the number of private farms is already large enough to affect local markets for agricultural inputs and services.

Since most agricultural land was traditionally assigned to farm enterprises, the implementation of land redistribution required the creation of a special reserve (15.6 million ha as of January 1993). The reserve was originally formed by quasi-voluntary transfer of poorly utilized land from collective and state farms to municipal councils, but the farm enterprises continued to work much of this land, either on informal user rights or through formal leasing. Individuals seeking to augment private holdings or persons not entitled to land allocation can apply to the rural councils to purchase allotments from this redistribution reserve. In the future, the reserve may be called upon as a source of
additional land for people exiting collective farms with inadequate land shares. Although the reserve is large enough to satisfy claims of many new applicants, future growth of private farming will put additional pressure on collective units to assign specific parcels to individual owners within the collectives. Internal division of land within collectives and functioning land markets will be more important in the future.

The new distribution of land ownership in Russia is a major departure from the traditional pattern during the Soviet period, when the state owned all agricultural land. It is not, however, qualitatively different from the mixed-ownership system in much of Central and Eastern Europe during the era of collectivist agriculture after 1948, when state, collectives, and private individuals formally owned land in different proportions.

**SURVEY RESULTS**

As viewed from the sample data, new collective enterprises look and behave much as did their predecessors, the state and collective farms. Farm employees still derive their livelihood from wage work in the collective sector augmented by income from subsidiary household plots. The increase of household plots through farm reorganization has not been significant enough to change their qualitative role within the collective system.

Managerial behavior on reorganized farms appears to differ little from that on farms that did not reorganize. Managers in this survey are guiding their farms through reorganization, as mandated by decrees, but do not appear to be doing so in an atmosphere of crisis or urgency. The farms are not in a financial crisis and the level of reported farm debt is strikingly low. Farms owe an average of just under ten million rubles, and are owed between 4 million and 6 million rubles, largely by the state. Indebtedness can be compared to a total value of nonland asset shares of 140 million rubles per enterprise on average. On many of these farms, the combination of price and credit subsidies throughout 1992 appears to have softened the financial impact of the change in relative prices: although collective enterprises had made few if any changes in employment and production, 80% of managers expected to show a profit in 1992.

The managers' survey indicates very little perception at the farm level that traditional practices are threatened and production must fundamentally change in response to new conditions. Farms are reorganizing, but fully 58% of managers expect the reorganization to have little effect on the farms' performance or do not know what the
effect will be.

Changes of Land Ownership and Use

*Land in Collective Enterprises*. Of the farms in the sample, 60% reported that their land was in collective shared (*dolevaya*) ownership, and approximately 30% in collective undivided (*sovremestnaya*) ownership. Only 4 farm managers, or roughly 2%, indicated that their land was in individual ownership. Almost two-thirds of managers report that they have documentation affirming their collective’s right to ownership of their land.

Land shares reported in this sample are relatively small, averaging 11-12 ha. The largest reported average share is 36 ha. These land shares are smaller than the per household endowments of land that private farmers brought to their farms, varying from 72 ha in Novosibirsk to 48 ha in Rostov and 20 ha in Pskov. The definition of a land share ranges from a paper entitlement to unspecified land to designation of an actual physical allotment. In 81% of cases, the size of an allotment had been determined, but no physical assignment of land had been undertaken. In 11% of cases, individual plots of land had been assigned to households, but land was still worked collectively. There appears to be no clear correlation between the form of collective land ownership and the kind of land share issued.

Virtually all farms that reported dividing land to workers included pensioners among the eligible claimants. A smaller proportion (75%) included employees in local social services, and fewer (about 50%) included rural doctors, teachers, and other employees of public services off the farm. There is no systematic difference in size of share according to the status of the recipient. The broad eligibility base accounts for the difference between land area per worker (26 ha) and the average share size (11-12 ha). Creation of the redistribution reserve is another factor reducing the share size. Managers reported that, since 1990, farms had lost on average 1200 ha (out of 8000 ha), about half to the district reserve, one-quarter to subsidiary household plots, and one-third to newly created private farms.

The most commonly reported rights of holders of land shares are the following:

- trade the share for land upon leaving the collective to start private farming (77%)
- or for other reasons (20%);
pass the share in inheritance to heirs within the farm membership (72%) or to any heir (40%);
- receive cash dividends (67%) and products in kind (over 50%);
- sell shares either to the enterprise or to individuals within the enterprise (40%).

Most employees intend to remain in the collective enterprise by investing their land shares with the collective. Only 6% intended to use the share to start a private farm and another 6% planned to use the land share to expand their household subsidiary enterprises.

**Land in Subsidiary Household Plots.** Employees of collective enterprises have a closer personal identification with the household subsidiary plot than they do with collectively owned land. Although farms had in general distributed land shares, employees uniformly excluded the land share when asked to describe land they considered to be "their own."

Household subsidiary agriculture contributes from one-quarter to one-half of household income of these farm employees. Land area in household plots is still very small. Based on employee interviews, half of household plots were 0.2 ha or less in 1990, and half were 0.25 ha or less in 1992.

The ownership of household plots is a snapshot of land reform in progress (Fig. 3a). About 30% of parcels are registered in private ownership. The majority of household plots (56%) are still held under the traditional user rights (pol’zovaniye). Very little land is leased for household subsidiary production, but 13% of parcels are held in lifetime inheritable possession (vladeniye).

Thirty-six percent of parcels in household plots in this sample have documented tenure status. Yet the presence or absence of documents merely reflects the speed with which tenure status is changed and documented by local authorities, rather than genuine differences in security of tenure. Respondents are accordingly confident that their tenure will be ultimately confirmed and that they will retain the land even if it is still undocumented and held only in use rights.

**Land in Private Farms.** Private farms in the five surveyed provinces are a mixture of single-family and multi-family holdings. Amalgamations of several families are particularly frequent in Saratov, Novosibirsk, and Orel provinces. were 30-38% of
the respondents are multiple farms with 2 to 5 households. A curious phenomenon is observed in Saratov, where a total of 6 farms (2%) are amalgamations of from 20 to 50 households.

The variability in number of families per farm explains much of the reported variability in farm size. Single-family farm size in Saratov and Novosibirsk averaged 55 and 47 ha respectively, while the average farm size over all farms was 135 ha in Saratov and 180 ha in Novosibirsk.

Two-thirds of farms in the sample were established in 1992, and 30% in 1991. Two-thirds of private farmers worked in the past on collective or state farms, and almost one-fifth were migrants from urban areas. About one-quarter of those who formerly worked on state or collective farms indicated that they received nothing upon leaving the farm. Private farmers who left collective enterprises with anything usually left with land allotments, ranging from 14 ha in Pskov to 60 ha in Novosibirsk.

Almost half the land in these farms is privately owned (Fig. 3b). Leasing is another important source of land (17%). A substantial proportion of land was, at the time of the survey, still held in the old lifetime possession (vladenie) status (60% in Orel and 45% in Novosibirsk) and will eventually be re-registered as private property. About two-thirds of private farmers report that they do not pay for land use. Among those who pay, cash rent is reported to be the most common kind of payment. Private farmers are exempt from payment of land tax during the first five years of their existence.

Farmers reported that 90% of parcels were documented. Security of tenure appears to be high. Most privately owned land is considered secure, and much of the less secure land is in use right or leased.

The source of land in private farms reveals a wide range of administrative procedures for implementing land reform. It also highlights the importance of the redistribution reserve in the past, since only 30% of parcels came directly from collective and state farms. In Saratov, farmers received land largely from the district council and from the collective or state farm on which they worked. In Rostov, the village council was another major source of land. In Orel, the district council provided 43% of parcels and enterprises for which the farmers had not previously worked surprisingly provided as much as 38%. In Novosibirsk, 62% of parcels came from the district council. In
Pskov, the district council was the main source.

**Farm Reorganization in the Sample**

By the end of 1992, 90% of the farms in the sample had held meetings to consider reorganization and had taken decisions. Of the few that had not, most considered themselves exempt from reorganization, e.g., because they were teaching or experimental institutions. Fifty-two percent, or more than the national average (43%), chose to become limited liability partnerships. Ten percent retained their former status as state or collective farms. Twenty-six percent became closed joint stock companies.

In almost half of reorganizations, no employees left the enterprise to begin private farming. In approximately one-third of cases, from one to nine employees (out of an average work force of about 300) left during reorganization. In the remaining 20% of cases from 10 to 134 people left the farm during reorganization.

At the time of this survey, 84% of farm enterprises had determined shares for physical assets (compared to 92% that had determined land shares). Despite the assignment of asset shares to individuals, virtually no monetization of shares or actual distribution of assets had taken place. Approximately 80% of responding employees indicated their intentions to assign their asset (as well as land) shares to the farms on which they were employed for collective use, and only 6% expressed intention to use their shares to start private farms. Farm managers reported the value of asset shares to be 270,000 rubles on average in December, 1992. These share values can be compared to the reported start-up investment of about 800,000 rubles for private farms established in 1992.

The main obstacle to restructuring cited by managers was communicating to employees the meaning of new laws and decrees. The managers' own access to information was a lesser problem. The employee survey confirms that employees are inadequately informed about the ongoing processes and the options available to them, or at least differently informed than their managers. In several important dimensions the restructuring parameters are differently reported by employees and managers of the same farms.

One of the objectives of the reorganization is to change the economic performance of farms, through staffing decisions, internal incentives to work, choice and productivity
of inputs, and product mix changes. Yet only 10% of managers reported that they would dismiss workers they considered to be redundant, while 80% indicated that they would not dismiss workers even if they could not meet payroll obligations in the future. Fewer than 15% of respondents indicated that, if unable to meet payroll, they would cut wages, cut workers, or seek alternative temporary employment for redundant staff. The preferred solutions in case of inadequate income to meet payroll were taking additional debt (70%), increasing arrears for other expenses (65%), and postponing wage payments (57%).

Social Services

Farm managers report spending about 10% of total costs on social services. Farm employees report receiving a wide range of services from their employers. Most households (83%) receive some medical care through the farm. About 40% of households receive a child allowance from the farm. Two-thirds of households are assisted in working their household plots; 40% receive assistance in maintaining housing; 85% rely on the farm for transportation services. Consumer subsidies are common for food, but the exception for non-food items.

Most respondents do not anticipate problems with access to services were they to leave the farm enterprise. Government is a partner in providing the critical services of education and medical care, and a tradition of nonexclusive access prevails. A notable exception is housing and utilities: almost one-third of respondents expected problems in this area if they left the farm.

Collectives continue to provide many services even to private farmers in their areas. Very few farmers reported problems with access to schooling or medical care after they left collectives. More than half (55%) of employees indicated that loss of social benefits provided by their employers was not important in their decision as to whether or not to enter private farming. Concerns about social benefits ranked considerably below inadequacy of capital and machinery as factors keeping employees within collective enterprises.

This relative complacency with regard to social services is not likely to persist if the number of private farmers significantly increases in the future. Many collectives have fewer than ten private farmers in their environs, compared to a collective work force of about 300, and the cost of continuing to maintain services for this small group of people
is not great. Managers' ability to carry expenses for social services and provide relatively open access will fall as the number of private farmers increases and as subsidies currently benefiting most agricultural enterprises are reduced.

Farms have the option of turning facilities for social services over to municipal governments during restructuring. There is, however, no universal enthusiasm for shedding the social assets from the farm balance sheets.

Private Farming

The 984 households of private farmers in the sample resemble households of employees in size, family composition, and age. About three-quarters of households have four or fewer members. Private farmers on average are considerably better educated than farm employees. Nearly 70% of private farmers previously worked on collective or state farms, and 18% left jobs in urban areas to take up farming. Most farms are single-family units, although some are agglomerations of multiple families with one individual registered as head of farm. The average size of a single-family farm in the sample is around 50 ha, while multiple-family farms are much larger, with over 100 ha of land in most cases.

Private producers differ from collective enterprises most strikingly in the product mix; in particular, in the greater relative weight of the crop sector and lesser dependence on sales of livestock products (Fig. 4). Collective enterprises in the sample derive about 40% of earnings from livestock, and private farmers derive only about 20%. The difference is particularly striking in comparison with subsidiary household plots of collective farm employees, the traditional "private" agriculture in Russia, where two-thirds to four-fifths of earnings are derived from livestock products. Moreover, private producers (similarly to subsidiary household farmers) report that livestock production is profitable under their technology and at their levels of output, while managers of collectives invariably report that livestock production is unprofitable. The study suggests that as private farmers leave collectives, they reinvest in product mixes and technologies more appropriate for new relative prices. The growth of private farming thus appears to be the vehicle through which the agricultural sector changes product mix and adjusts out of products and technologies for which profitability is low under new relative prices.
Entrants into private farming need machinery and small loans. Lack of access to machinery services and capital are reported to be the main factors keeping producers in collectives, much more so than potential difficulties with access to social services.

Private farmers who began in 1991 raised their start-up capital from personal savings and bank loans. For those who began farming during the inflation of 1992, savings were an insignificant source of investment. Property shares of people leaving collective enterprises so far have not provided significant capital for private farming. Yet 40% of farmers reported that they had no outstanding debt or loans. There is no clear indication that either high interest rates or credit rationing prevent access to loans.

Private farmers who began farming in 1992 report start-up investment of about 300,000 rubles, or $4000, provided by bank loans usually with a guarantee from AKKOR, the Russian Association of Private Farmers. The start-up amounts per farm are low in part because private farmers usually retain their former housing, even if it is owned by the collective, and because they maintain fewer livestock. These are modest investments, but the lack of farmers' own capital and the importance of guarantees from AKKOR raise questions about the adequacy of the system to serve even the current flow of new farmers.

Private farms rely primarily on labor of immediate and extended families. Ninety-one percent of farms report no permanent hired workers. About three-quarters report that they do not hire seasonal workers. Households of private farmers depend on earnings from their farms for 80%-90% of family income. Spouses tend to be employed either full or part time on the farm: 45% of spouses list private farming as their primary occupation. A significant proportion (about 25%) earn nonagricultural wages or pensions. The data suggest but do not establish that few households are mixed, with one spouse retaining employment on a collective agricultural enterprise, and the other operating a private farm. Part-time work off the farm and diversified sources of household income do not appear to be common.

Private farmers sell more of their output through state procurement organizations than through other channels, but the majority of producers report that they can choose marketing channels. Very little output is marketed through collectives. Private farmers report relatively few problems with marketing, except for dissatisfaction that prices
received are too low (70%-90% of respondents). The prices that private farmers report receiving correspond roughly with those that farm managers report, although lack of standardization for quality makes it difficult to compare prices. Late payment for products is not perceived as a major problem.

Private farms indicate diverse sources of input supply. Relatively little comes from private suppliers, but the farms do not appear dependent on collective enterprises in their localities for most inputs: they also buy directly from the state (seeds, seedlings, fertilizers, herbicides and pesticides). Private farmers are almost fully dependent on the state for provision of fuel, although 8% report buying through a farm cooperative. Machinery repair services and spare parts come from various sources, including state organizations, collective enterprises, and private individuals. Construction materials come through state channels, while construction services are purchased in the private sector. Private farmers, similarly to farm-enterprise managers, reported very few inputs to be in short supply, although high prices limited the quantities that private farmers were able to buy. A number of farmers indicated that they were both consumers and suppliers of agricultural inputs. About one-fifth of farmers supply seed and seedlings, and between one-quarter and one-half supply some kind of machinery service, equipment, spare parts, and sometimes even fuel.

Regional cooperation appears to be developing in production and service areas. Between 30%-40% of private farmers indicated that they join with other private farmers for production, marketing, input supply, use of machinery, and provision or receipt of credit. Two-thirds of private farmers in the sample are members in AKKOR. This is not surprising in view of AKKOR’s role as a national lobbying organization for private farmers and its active role in credit and machinery allocation.

CONCLUSIONS

During 1992 two pivotal developments with regard to land tenure were accomplished in Russia. Land shifted from state ownership into mainly collective ownership. The theoretical right of individual members to exit with a share of land, earlier affirmed by law, was reinforced by the process of farm enterprise restructuring, which involved issuance of land shares in some form on most collectives.

Yet despite these developments Russian agriculture was, at the end of 1992, still
overwhelmingly collective. The new collective enterprises of various forms look and behave much as did their predecessors, the state and collective farms. Managers of the new joint stock companies, limited liability partnerships, and various other collective enterprises show little indication that they must or may operate differently than they did in the past. Few intend to reduce their work force or shift specialization toward more profitable activities. There is no indication that internal incentive systems will change to pay factors of production, particularly land and labor, economically efficient rewards, i.e., their marginal contribution to earnings. Farm-enterprise employees still have a traditional view of their role within the collective, and derive their livelihood from wage work supplemented by income from the small household plots.

The developments in 1992 took place at a time when continued subsidies, cheap credit, and the absence of effective bankruptcy legislation allowed farms to retain the labor force they had prior to restructuring and to preserve their traditional attitudes. If a macroeconomic stabilization program is implemented in 1993, interest rates will rise, grain prices will rise, energy prices will rise again, and subsidies will be drastically cut. Under these circumstances, many collective enterprises will be unable to meet payrolls for several months at least. As earnings in the collective sector fall, more families will find it in their interest to take land and asset shares and leave. As the number of households leaving with land increases, those who remain are likely to protect their access to average quality land by having it identified before much land is removed. Rather early in the process, therefore, it is likely that a number of farms will reconvene general meetings and vote to re-register as associations of peasant farms, with identification of individual land shares.

If a stabilization program is implemented and if the new land legislation stipulating that land shares are demarcated only upon exit from the collective is passed, the Russian agricultural sector is likely to undergo a rapid restructuring more fundamental than that in 1992. The result of such a restructuring would be large scale transfer of land from collective to individual ownership, and a proliferation of private family farms and voluntary producers cooperatives along the lines of associations of peasant farms.
TABLE 1. Farm Sizes in Russia: Survey Averages for End of 1992

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<th>Category</th>
<th>Size</th>
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</tbody>
</table>
Fig. 1. Land Tenure in Russia: January 1, 1993

- Collective: 90%
- Private farms: 4%
- Household plots: 6%
Fig. 2. Structure of Farm Enterprises in Russia: January 1993

- State farms: 22%
- Partnerships: 32%
- Collective farms: 27%
- Other: 20%
Fig. 3. Land Ownership: Survey Data

(a) Household plots

- Private: 30%
- Use: 56%
- Lease: 1%
- Possession: 13%

(b) Private Farms

- Private: 48%
- Lease: 17%
- Possession: 28%
- Use: 7%
Fig. 4. Product Mix in Sample Farms