

RDI Reports on Foreign Aid and Development #100

A Vision for Agricultural Land Reform in Russia

**Roy L. Prosterman
Leonard Rolfes, Jr.
Jennifer Duncan**

November 1999

This report may be reproduced
in whole or in part with acknowledgment
as to source.

© Copyright Rural Development Institute 1999
ISSN 1071-7099

The Rural Development Institute (RDI), located in Seattle, Washington, is a nonprofit 501(c)(3) corporation. RDI is a unique organization of lawyers devoted to problems of land reform and related issues in less developed countries and in countries whose economies are undergoing transition. RDI's goal is to assist in alleviating world poverty and instability through land reform and rural development. RDI staff have conducted field research and advised on land reform issues in 34 countries in Asia, Latin America, Eastern Europe and the Middle East. For more information about RDI, visit the RDI web site at <www.rdiland.org>.

Roy L. Prosterman is President of RDI and Professor of Law at the University of Washington School of Law. Leonard Rolfes Jr., J.D., is Deputy Director of RDI. Jennifer Duncan, J.D., is a Staff Attorney at RDI.

The authors express their appreciation to the William H. Gates Foundation, whose generous assistance made this report possible, to the LeBrun Foundation, for its support of the field research that informed this report, and to the United States Agency for International Development, which provided support to RDI's work in Russia throughout much of the 1990's.

Correspondence may be addressed to the authors at the Rural Development Institute, 4746 11th Avenue N.E., #504, Seattle, Washington 98105, U.S.A., faxed to (206) 528-5881, or e-mailed to <rdi@u.washington.edu>.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
INTRODUCTION	2
I. The Peasant Farm Enterprise.....	3
II. A Vision for Creation of Peasant Farm Enterprises	4
III. Needed Legal Measures to Realize the Vision.....	10
IV. The Needed Financing for the Vision.....	13
V. Criteria for Meaningful Restructuring of Collective Farms into Corporate Farms	16
CONCLUSION	16

EXECUTIVE SUMMARY

In Russia today many agricultural experts and policymakers are of the opinion that Russia's farm sector will remain depressed over the long term, and that large-scale farms will continue to dominate Russian agriculture for decades to come. These observers also hold the view that, to the extent there is any "restructuring" of agriculture, it will consist of transformation of the large-scale "collective" enterprise into large-scale "corporate" enterprises. Such a view is profoundly pessimistic, contemplating as it does an organization of the Russian agricultural sector that is highly unlikely to be the result of market forces, and that (as the global evidence shows) will almost ensure continuing low efficiency and low productivity.

We do not accept this pessimistic view of Russia's agriculture, and in response have tried to construct a far-reaching, but workable alternative vision of structural transformation of Russian agriculture in which the peasant farm enterprise ("family farm" or "private farm" in Western parlance) would play a more prominent role. To do this, we estimated the amount of agricultural land that would be potentially available for use on peasant farm enterprises from the present day until 2010, then estimated the potential demand for such land for use on peasant farm enterprises for the same time period given the absence of certain legal and financial constraints.

The results were encouraging. By 2010 it is quite possible that 82 million hectares of agricultural land could be in use by peasant farm enterprises (or in household production). These 82 million hectares represent close to 40 percent of Russia's total agricultural land base of 222 million hectares, and would be a vast increase over the roughly 10 percent of agricultural land currently used by peasant farm enterprises (or by household producers).

For this vision to become reality, however, key legal and financial constraints must be lifted. Regarding legal constraints, parliament-adopted federal law is needed which: decisively affirms and protects private parties' rights to sell, bequeath, lease, mortgage and use agricultural land as their judgment deems best (with reasonable restrictions); privatizes additional agricultural land which is currently state-owned; and protects rights of land share owners. Regarding financial constraints, financial resources need to be made available to peasant farm enterprises for purchase of needed machinery to start-up or expand operations. The level of these resources would be significant, but could be significantly tempered by ameliorating factors.

As a final matter, despite the fact that the expansion of the peasant farm enterprise sector offers the best route for meaningful agricultural land reform in Russia, large-scale farms will continue to play a prominent role. If any meaningful restructuring of such farms from "collective" to "corporate" is to occur, three principles must be followed: the resulting entities must be much smaller than the current collectives; federal laws regulating the rights of shareholders and workers must be effectively implemented; and flexibility for further change must be preserved by providing that the resulting large-scale entities should not be able to own land, or receive long-term leases to land.

INTRODUCTION

The process of agricultural land reform in Russia has been underway for a decade. Overall the results are unsatisfactory. In the early stages of the reform process, legislation was adopted which called for: (1) the transfer of Russia's agricultural land into the ownership of its citizens; (2) the restructuring of the 26,000 collective and state farms; and (3) the creation of a significant number of peasant farm enterprises worked by single families or small groups of families (family farms) [hereinafter referred to as "PFE's"].¹ On the bright side, over half of Russia's agricultural land base has been transferred into the ownership of its citizens, largely through the land share system. However, collective farming still remains the dominant mode of agricultural production, with about ninety percent of the land farmed in such a manner.² PFE's cultivate only about six percent of the agricultural land, with another four percent being used in household production. Additionally, the legal base for private ownership of land, and for development of PFE's, remains weak.

Recent discussion among agricultural experts and policymakers in Russia has distilled two widely-held conclusions: (1) large-scale farms will continue to dominate Russia's agriculture for decades to come; and (2) "lacking a clear concept of the transformation" of the Russian farming sector, that sector "will be deeply depressed for [the] long-run perspective and all small achievements of the past years of the reforms will be wasted."³ These same observers also hold the view that, to the extent there is any "privatization" of agriculture, such privatization will consist of transformation of large-scale "collective" enterprises into large-scale "corporate" enterprises. What the difference is between these types of enterprises is unclear.

We do not accept this pessimistic view of the future of Russian agriculture, and suggest that a significant transformation of Russia's agricultural sector is realistic and potentially achievable over the period between now and the year 2010. We think the conditions exist for a voluntary, significant growth of the PFE sector. Also, while we recognize that large-scale farms will continue to play a prominent role, they can be downsized and restructured to make them more economically viable and to ensure that their workers benefit.

We will address these issues in five sections. Section I presents the international evidence showing that the PFE is the most highly efficient and productive type of agricultural producer, a truth that has recently been forgotten or ignored by many Russian experts. Section II outlines a realistic vision for the creation of substantial numbers of PFE's over the next decade. Section III indicates the needed changes in Russian law if this PFE vision is to become reality. Section IV discusses the approximate scale and application of the financing that will be needed. Finally, Section V provides a brief list of criteria for restructuring of collective farms into corporate farms to make that restructuring meaningful.

¹ See Law of the RSFSR "On the Peasant (Farm) Enterprise" (1990); Decree of the President of the Russian Federation No. 323 "On Urgent Measures to Implement Land Reform in the RSFSR" (December 27, 1991); Resolution of the Government of the Russian Federation No. 86 "On the Procedure for Reorganization of Collective and State Farms" (December 29, 1991).

² Much of this collectively-farmed land is actually privately owned by land share owners who have not withdrawn their land from collective use.

³ Evgenia Serova, *The Impact of Privatization and Farm Restructuring in Russian Agriculture* (September 1999), p. 24 (English version) (paper on file with the Rural Development Institute).

After working in the former Soviet Union and then Russia on the issue of agricultural land reform for the past nine years, and against the background of our work on this issue in seventeen other countries which are going through the transition away from a centrally planned economy, we conclude that a realistic and achievable transformation is possible over the next decade if certain legal and financial restraints are removed. Nor should this conclusion be greatly surprising. Such agrarian transformation has, after all, already largely taken place in such a relatively poor Eastern European country as Romania, in the Baltic States, and in the former Soviet republic of Kyrgyzstan.

I. THE PEASANT FARM ENTERPRISE

At the present time many Russian agricultural experts do not see the PFE playing a large role in the restructuring of Russian agriculture, and do not think that the PFE should play a large role. This view is unfortunate and mistaken.

The private family farm (PFE) is the most productive and efficient type of agricultural producer in the world. For example, agriculture in the developed market economies of Western Europe, Canada, and the United States is highly productive, largely due to the fact that these economies feature private family farms as their dominant type of producer. By contrast, the huge collective and state farms, which were the hallmark of Soviet agriculture and continue to dominate agricultural production in Russia, are notoriously unproductive and inefficient. If we take the best results in average grain yields in Russia (or before that in the USSR) of around 1,700 kilograms per hectare, grain yields in far northerly agricultures such as Finland and Canada outpace Russia by ratios of 2:1 and 1.5:1, respectively, while the U.S. outpaces Russian yields by over 2.5:1, and Western Europe by 4:1.

Focusing solely on the Russian context, our organization, the Rural Development Institute, has conducted extensive field research in 17 Russian provinces throughout the 1990's. This research has consisted of extensive interviews with both peasant farmers and managers of large agricultural enterprises, and has consistently shown that established peasant farmers: work harder and more effectively; use available resources in a more efficient and prudent manner; pay higher rent to lessors of land shares; and have higher yields than nearby former collective farms.

Many commentators on Russian agriculture minimize the role that PFE's can play, for two reasons: (1) they claim that PFE's are not as efficient as large-scale corporate farms because they cannot take advantage of economies of scale in production; and (2) they claim that United States agriculture is in the process of restructuring from smaller-scale family farms into larger-scale corporate farms, thus Russia should focus its resources and energy toward developing such farms itself. Both of these assertions are in error.

Regarding the economies of scale argument, economies of scale in agricultural production are largely presumed by the promoters of large-scale farming, but are not supported by empirical evidence. The general consensus of researchers on economies of scale is that they do not exist in agriculture, except

under very special circumstances.⁴ A recent study by World Bank researchers claims that “the literature contains no single example of economies of scale arising for farm sizes exceeding what one family with a medium tractor could comfortably manage.”⁵ By contrast, smaller farms have several natural competitive advantages, such as minimal management bureaucracy and minimal labor monitoring costs.

Viewing this issue from a different angle, most studies examining the relationship between farm size and productivity show that smaller farms are generally more productive than larger farms, that output (per unit of farmland or unit of capital invested) decreases as farm size increases.⁶ For example, a World Bank study of Polish private farms found that small farms were more efficient than large farms over 20 hectares. Relative total factor productivity (TFP) was highest for farms of 10-15 hectares, but farms of 5-10 hectares and farms less than 5 hectares also showed higher TFP than farms over 20 hectares.⁷

Regarding the contention concerning the transition of U.S. agriculture to large-scale corporate farming, several factors must be considered. First, 94 percent of all farms in the United States are family farms, and these farms cultivate approximately 65 percent of agricultural land. Second, only an estimated one-fourth of one percent of U.S. farms cultivate 5,000 hectares or more, the typical size of a current Russian collective, and these U.S. farms only cultivate about three percent of the arable land found in the United States. In other words, 97 percent of arable land in the United States is cultivated in units smaller, and usually much smaller, than those found on Russian collectives. Third, the movement of U.S. farms towards larger sizes has chiefly been the result of the operation of the market over several generations, in which the more motivated and efficient family farmers buy out others who are less motivated and efficient, thus gradually enlarging their holdings. Thus, while it is correct to say that larger-scale corporate farming is becoming more prevalent in U.S. agriculture, family farms still dominate the agricultural landscape, and large-scale U.S. farms are generally far smaller than former Russian collectives. In short, the gradual transition to larger-scale corporate farming in the U.S. does not support the argument that farms of the massive scale found in Russia should be preserved.

II. A VISION FOR CREATION OF PEASANT FARM ENTERPRISES

At this point, roughly 10 percent of Russian agricultural land is operated outside of the cosmetically revamped collective-farming sector (almost no large-farm manager whom we have interviewed claims that there have been any real changes; nor does a recent review of the situation by one of Russia’s leading agricultural economists [hereinafter referred to as the “Serova paper”] find any

⁴ Hans Binswanger & Klaus Deininger, “South African Land Policy: The Legacy of History and Current Options,” in Johan van Zyl, Johann Kirsten & Hans Binswanger, eds., *Agricultural Land Reform in South Africa: Policies, Markets and Mechanisms* (1996), 64.

⁵ Klaus Deininger, *Cooperatives and the Break-up of Large Mechanized Farms: Theoretical Perspectives and Empirical Evidence*, World Bank Discussion Paper 218 (November 1993).

⁶ For a summary of these studies and a more comprehensive discussion of the economies of scale issue, see TIM HANSTAD, ARE SMALLER FARMS APPROPRIATE FOR FORMER SOVIET REPUBLICS? (Rural Development Institute Reports on Foreign Aid and Development No. 97, February 1998).

⁷ Johan van Zyl, Bill R. Miller, & Andrew Parker, *Agrarian Structure in Poland: The Myth of Large-Farm Superiority*, World Bank Policy Research Working Paper 1596 (April 1996).

changes of significance).⁸ Of this 10 percent, about 6 percent is land held in some 270,000 PFE's (average size 50 hectares), with another 4.5 percent being land used in household production. The question thus arises: how much land could realistically be in use by non-collectivized agricultural operations by 2010? In order to answer this question, we must estimate:

- The potential supply of land available for private farming; and
- The potential demand for such land by private farmers.

Potential supply of land available for private farming

The potential supply of land available for private farming by 2010 can come from four main sources:

1. Existing land shares being used by former collective farms;
2. Land from the raion land redistribution funds being used by former collective farms;
3. Land used by large enterprises exempt from the land share system; and
4. Land already used by PFE's or household producers.

Land from existing land shares being used by former collective farms could be supplied from four analytically-different groups of rightholders:

- First, a large supply of land will be from land shares inherited by the children of pensioners who own land shares on the large farms. Some 108 million hectares of agricultural land were transferred into private ownership as land shares in the early to mid 1990s. Roughly 40 percent of these shares (about 43 million hectares) went to people who were already pensioners. By 2010 it is likely that roughly three-quarters of these pensioner-owned land shares, representing about 32 million hectares, will have passed by inheritance to their children. Most these children live in urban areas, not on the collective, and will be highly motivated to dispose of their land share rights—by lease or by sale—at the highest price they can obtain. Our field research indicates that PFE's are more likely to offer the highest prices than are the former collectives. These 32 million hectares represent about 30 percent of all land share land.
- Second, the remaining one-quarter of the land shares distributed to pensioners will remain in the hands of these pensioners (i.e., they will not die by 2010). These land shares represent about 11 million hectares, or 10 percent of all land share land. These pensioners will often have social and psychological reasons, and face a variety of pressures, not to transfer their land rights to PFE's outside the collective. Still, if a market in agricultural land is permitted to develop freely, increasing numbers of them will make such transfers in order to gain supplementary income beyond their meager pensions.
- Third, a further roughly 20 percent of land shares (equal to about 22 million hectares) will be owned by people who were workers when the land shares were originally given out in the early to mid 1990s, but who will have become pensioners between that time and 2010. The same analysis applies to these land shares as to the land shares in the previous two

⁸ Serova, *supra* note 3.

paragraphs, except that a smaller proportion of these land shares will have passed to the pensioners' children by 2010.

- Fourth, a small proportion of non-pensioner households on the large farms may decide to leave with their land shares to start PFE's. This group represents roughly 10 percent of land shares, or the equivalent of a further 11 million hectares. This estimate is derived from the conclusions of a 1993 Agrarian Institute poll, which is presented in the discussion below on potential demand for the available supply of land.

If we add up the preceding figures—30 percent, 10 percent, 20 percent, and 10 percent of the 108 million hectares of land-share land—we reach the striking conclusion that, by 2010, up to 70 percent of the agricultural land on the large farms which is in land shares could be available for the expansion and formation of PFE's. This 70 percent represents about 76 million hectares.

The second main source of land potentially available for private farming by 2010 is the 14 million hectares from the raion land redistribution funds currently being used by former collective farms.⁹

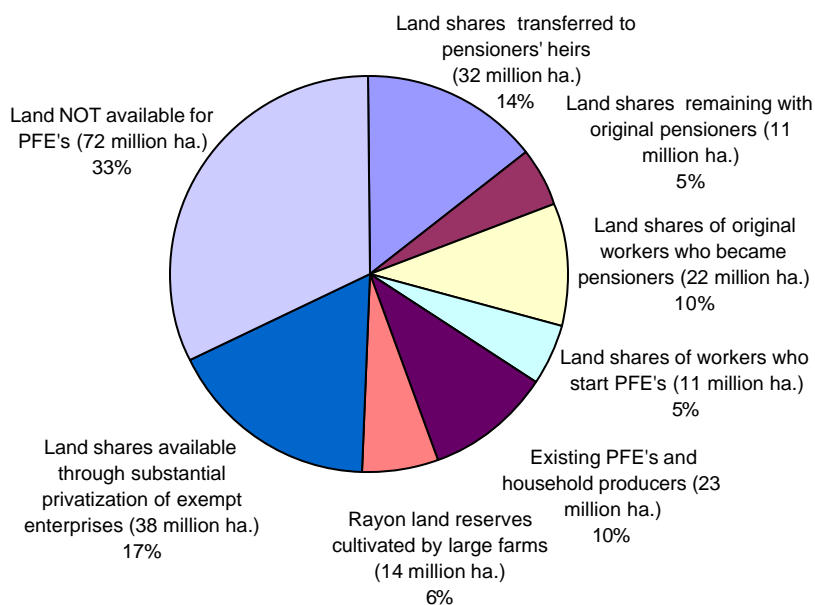
The third main source of land is from the so-called “exempt” agricultural enterprises. Some 67 million hectares, or 30 percent of all agricultural land, are in enterprises on which some portion of the enterprise is engaged in specialized production, thus is not included in the land-share figures above. If the bulk of these lands would be privatized as land shares (following Eastern European experiences, only 5 percent or less of all land would be exempt, rather than 30 percent), roughly 54 million hectares would be added to the area of land under land shares. Applying the analysis of the existing land shares to these new land shares (whose owners should have a roughly parallel age structure), about 70 percent of this land, or 38 million hectares, would be potentially available for transfer to PFE's by 2010.

The final source of land available for private farm use by 2010 is, of course, the roughly 23 million hectares *already* being used by PFE's and by household producers.

⁹ *Id.* at Table 13, p. 22 (English version).

To sum up the amount of land that could potentially be available for use on PFE's by 2010, 76 million hectares could be available from existing land shares, 14 million hectares could be available from raion land redistribution funds, 38 million hectares could be available from exempt enterprises, and 23 million hectares is already being used by PFE's and on small plots. These four sources together represent over 150 million hectares of land that could potentially be available for use by 2010, or more than two-thirds of the 222 million hectares of agricultural land in Russia. We should keep in mind that most of this does not represent simply land availability, but represents owners (especially the

Agricultural Land in Russia: Sources of Potential Supply for Peasant Farm Enterprises by 2010 (Total available is 150 million out of Russia's 222 million hectares of agricultural land)



children of pensioners) who will be *actively seeking* the most profitable way to dispose of land rights through sale or lease.

As a final matter, the above discussion clearly shows that the organization of the Russian agricultural sector is potentially highly dynamic, and will be so for decades to come, unless the legal system and other institutions actively discriminate against the formation and expansion of the PFE sector. This conclusion arises out of the interaction of demographic and market forces described above, which will be almost inevitable unless deliberately suppressed.

Potential demand for land by private farmers

The second fundamental question when developing the vision for transformation of Russian agriculture is assessing the potential demand for land by private farmers. The potential sources of demand would appear to be in five main categories: existing PFE's; startup PFE's by land share owners now working on large farms; PFE's started by land share owners receiving their shares through inheritance; new PFE's created from land formerly held in exempt agricultural enterprises; and household producers:

-
- Existing PFE's have been slowly but steadily increasing their average farm size (from 42 hectares in 1992 to "more than 50 hectares" in 1998).¹⁰ If the existing key legal and financial constraints are removed (see Sections III and IV below), it is reasonable to assume that the average size of the 270,000 existing PFE's might grow from around 50 hectares today to roughly twice that size by 2010. That is, the land cultivated by the existing PFE's would grow from 14 million to 28 million hectares, or from 6 percent of agricultural land today to roughly 12 percent of agricultural land (at 100 hectares these PFE's would still have reached only half the average size of family farms in the U.S.).
 - Many collective-farm households may have an active interest in establishing their own PFE's. A 1,000-household survey done in January 1993 by the Agrarian Institute suggested that on the collectives there existed a potential group that had an active interest in starting such farms themselves. While this potential group was only a small minority of collective-farm members, perhaps 600,000 out of the roughly 6 million households that own land shares, it is still significant. Again, assuming the removal of the key legal and financial constraints discussed in Sections III and IV, this interest in starting PFE's might reawaken and be reflected in the creation of a steady stream of new PFE's between now and 2010. If we assume that a number of households roughly equivalent to the 600,000 households projected from the January 1993 survey minus the roughly 100,000 who actually started PFE's after the date of the survey are affected, 500,000 new PFE's would be formed by this group by 2010. If we then assume that the average size of these new farms is only half the size we have projected the present PFE's to achieve by 2010 (50 hectares instead of 100) those new farms would occupy about 25 million hectares in 2010, or about 11 percent of agricultural land.
 - The preceding estimate on creation of new PFE's does not include creation that will take place on the 38 million hectares of land of exempt enterprises that should be included in the land share system, and that is potentially available for transfer to PFE's. Applying the analysis used in the preceding estimate to this exempt land, we would project demand for about 250,000 additional new PFE's averaging 50 hectares each (occupying a total of 12.5 million hectares).¹¹ This represents a further 5.5 percent of agricultural land.
 - Some people inheriting land from original land-share owners who were pensioners might decide to farm that land directly. We projected above that these heirs, living mostly in the cities, would dispose of about 30 percent of all land-share land (around 32 million hectares) between now and 2010. Also, there will be heirs of pensioners who have received land shares from land on large enterprises presently exempt from privatization, which will amount to roughly 16 million hectares. Again assuming the removal of the key legal and financial constraints discussed in Sections III and IV, it does not seem unreasonable to project that about 10 percent of this total of 48 million hectares of land (5 million hectares) will be farmed by the heirs themselves or by other city dwellers to whom the heirs transfer their rights. This projection is supported by the strong participation of city dwellers in the very first wave of PFE formation in the early 1990s, and by the experience of such countries as Romania, where the

¹⁰ *Id.* at Table 5 and p. 10 (English version).

¹¹ Since the land available and the estimated agricultural population on these heretofore "exempt" enterprises is approximately one-half that on the enterprises that had previously established land shares, we project a proportionate potential demand, which amounts to a demand by roughly 250,000 households on these enterprises versus 500,000 on the enterprises that had previously established land shares.

rights of city dwellers to own and work a family farm were clearly available. This total of 5 million hectares would be a further 2 percent of agricultural land.

- Finally, some household producers might be interested in expansion of their plots. Here, we conservatively project only a nominal growth in the household plot sector, say from 4.5 percent of agricultural land today to 5 percent by 2010, or 11 million hectares.

The above projections are summarized in the following table:

Current and Future Estimated Percentages of Agricultural Land
Operated by PFE's or in Household Production

	1999	2010
(1) Household production	4.5	5
(2) 270,000 existing PFE's	6	12
(3) 500,000 start-up PFE's	0	11
(4) 250,000 further start-up PFE's (on formerly exempt land)	0	5.5
(5) Inherited land operated by heirs themselves or by other city dwellers	0	2
Total	10.5 percent <i>(23 million hectares)</i>	35.5 percent <i>(82 million hectares)</i>

This potential demand for land of 82 million hectares which the 2010 figure represents can easily be met by the 150 million hectare pool of land potentially available for use in the private sector which we calculated above. Thus, it is reasonable to project that close to two-fifths of Russian agricultural land might be voluntarily shifted to PFE operation (plus household production) by 2010. This can happen, however, only with the enabling changes discussed in Sections III and IV below. But if it *does* happen, with such a substantial PFE sector in existence and competing with the large farms, and with the remaining 68 million out of 150 million hectares still available for shift by its owners away from use by the large farms, further break-up of the large-farm sector should rapidly occur.

III. NEEDED LEGAL MEASURES TO REALIZE THE VISION

Several legal measures are needed to lay the basis for a free market in land, the mechanism through which millions of Russian citizens can start PFE's, or alienate their land to PFE's, as described in Section II.

As an initial matter, some commentators have offered the opinion that the federal body of "legislation" concerning agricultural land is quite liberal, yet land market development is much delayed.¹² The implication of this opinion is that the law is already well developed.

Technically it is correct that federal land "legislation"—a term that encompasses presidential decrees as well as federal laws adopted after passage by the Duma and the Federation Council—is "quite liberal." In particular, Presidential Decree No. 1767 of October 1993, and Decree No. 337 of March 1996 allow private ownership for both agricultural and non-agricultural land, and of agricultural land shares, with the right to buy, sell and carry out the other transactions which are, around the world, associated with the concept of "ownership".¹³ The right of disposition of land is also provided for in Article 36 of the Constitution of the Russian Federation.

However, it is consistently clear from our farm-level interviews with land share owners, peasant farmers, large enterprise managers, and local officials that the absence of a federal law passed by both houses of the Federal Assembly and approved by the President that expressly affirms these rights, as well as dealing with other key legal issues of agricultural transformation, severely limits most transactions in agricultural land. This has been emphatically underlined for most potential participants in land transactions by the fact that the draft "Land Code of the Russian Federation," which has been on the verge of adoption by the Federal Assembly for the past three years (and has indeed been passed by both houses but successfully vetoed by President Yeltsin), either forbids or highly restricts most transactions in agricultural land (as well placing severe obstacles in the way of most structural transformation in agriculture). Potential participants in land transactions fear, quite reasonably, that transactions that are legal under existing presidential decrees would become impermissible under a new Land Code once it is adopted.

The only sector in which a nearly normal market in land is functioning in Russia is the small plots (household auxiliary plots, dacha plots, garden plots) which have been "owned" in the full sense for more than six years. A law adopted by the Russian parliament in late 1992, complemented by a regulation on how to actually carry out such sales issued in May 1993, have given potential buyers and sellers high confidence in the legality of such transactions.¹⁴ All or virtually all of the 265,689

¹² Serova, *supra* note 3, p. 21 (English version).

¹³ Decree of the President of the Russian Federation No. 1767 "On Regulation of Land Relations and Development of Agrarian Reform in Russia" (October 27, 1993); Decree of the President of the Russian Federation No. 337 "On Realization of Citizens' Constitutional Rights to Land" (March 7, 1996).

¹⁴ Law of the Russian Federation "On the Right of Citizens of the Russian Federation to the Private Ownership of Land Plots and to the Sale Thereof for Conducting Personal Subsidiary and Dacha Farming, for Gardening and Individual Housing Construction" (December 23, 1992); Resolution of the Government of the Russian Federation No. 503 "On Regulations of Purchase and Sale of Land Plots by Citizens of the Russian Federation" (May 30, 1993).

“sales-purchases” transactions in 1997 (and 218,759 in 1996) shown in Dr. Serova’s Table 11 are sales of small plots permitted under this specific federal law and implementing regulation. Relative to a total universe of about 40 million such small plots, this sales turnover—about 2/3 of 1 percent in 1997—is modest, but not negligible.

The transformation envisioned in Section II above will require a series of changes in Russian law:

- The fear of a regressive federal law on agricultural land must be definitively removed. Thus, a *progressive federal law* must be adopted by the State Duma and Federation Council which is acceptable to and signed by the President, embodying key rights. This federal law could be a redrafted and progressive Land Code, a more limited Land Law, or a law covering agricultural-land issues (such as briefly envisioned in the *Protokol* of December 1997 agreed to by President Yeltsin and legislative leaders).
- Turning to specifics, federal law must clarify and simplify the *right to withdraw land in kind from the collective farm*, whether by the owner of the land share or by one who has purchased or leased the land share from the owner. Presently there is too much ambiguity and complexity, with a significant likelihood that land of average quality and reasonable location will not be allocated, or will be allocated only after extensive argument or even litigation. Restriction of land allocation for PFE’s to a “massif” chosen by the enterprise can further reduce the chance of getting land of reasonable quality and location. (A regulation adopted by the Land Committee in Vladimir *Oblast* points the way to a quick and highly simplified process of land allocation.) A clear ability to get land out of the large farms easily is crucial to the transformation envisioned in Section II.
- A parallel point is that the land area in “exempt enterprises” must be drastically reduced. Here land withdrawal is presently not merely difficult but impossible. About 30 percent of agricultural land has been in enterprises that were totally exempted from allocation or withdrawal of land shares because some part (sometimes a very small part) of their operation was in “exempt” activities such as “elite seed breeding.” Eastern European experiences in administering similar exemptions indicate that far less than 5 percent of agricultural land, and perhaps only 1 or 2 percent, should need to be considered “exempt” if such an exemption is reasonably formulated and applied.
- Federal law should not permit any *irreversible contributions* of agricultural land or land shares to the large-farm enterprise (whether the enterprise is a joint-stock company, a production cooperative, still a collective farm, or in some other legal form).
- Federal law should ensure that the documentation and registration of *inheritance of land rights* is made simple and inexpensive. Apparently only 158,512 “successions” (inheritances), with an average size of less than one-third hectare each, were formally registered in 1997 (and 132,171 in 1996, averaging closer to one hectare each).¹⁵ Nearly all of these formalized inheritances are of small plots. Of particular importance to the transformation envisioned in Section II is that virtually no inheritances of land shares, which are the likely principal source of land for new and expanded family farms, are being formally documented and registered. Federal law should also reiterate (and the reiteration be widely publicized) that land shares,

¹⁵ Serova, *supra* note 3, Table 11, p. 21 (English version).

like any other valuable things owned by the deceased person, pass by inheritance to the children or other heirs of that person, whether or not the heirs live on the farm or in the city. Many collective-farm managers currently attempt to assert the contrary position, leading to additional delay, expense and discouragement for the heir attempting to claim his or her rights to the land share or to sell or lease out those rights.

- The *right to buy and sell* both land plots and land shares must be clearly proclaimed in federal law. Much of the transformation envisioned in Section II is dependent on the assurance of a clear legal right to buy additional land plots or land shares in private transactions, an assurance that does not presently exist. This does not mean that reasonable restrictions on this right cannot be adopted as part of such federal law. Such restrictions might include prohibition on foreign ownership of agricultural land (present in the laws of several American states), restrictions on change from agricultural use purpose, maximum-size restrictions, requirements that banks cannot own land (beyond that needed for their offices) for more than a short period of time, or sliding-scale “capital gains” taxes that would heavily tax profits from early resale of land after its acquisition. All of these reasonable limitations are present in the laws of some or many market economies.
- The *right to mortgage* agricultural land plots and land shares must likewise be clearly provided in federal law. In nearly all market economies, the principal method of financing sales of land is through the purchaser borrowing most of the money needed to purchase the land, and giving a mortgage on that land to the bank as security for the loan. At present, the Law “On Mortgage (Pledge of Immovable Property)” prohibits mortgage of agricultural land, and few sales involving agricultural land of any significant size or value will take place until that prohibition is reversed. In the absence of mortgage financing, a buyer must have accumulated cash of his own to pay 100 percent of the price (except in the rare case where the seller will permit the buyer to pay for the land in installments). In the market economies, the availability of purchase money mortgage financing for land acquisitions is of vital importance to the functioning of a land market. To protect borrowers, restrictions can be put on banks’ ability to take ownership of foreclosed-upon land for more than a short period of time.
- Federal law must also ensure a *broad right to lease* land plots and land shares. As with potential sales of agricultural land or land shares, the overhanging threat of a Land Code with highly restrictive provisions presents a substantial impediment to private lease transactions. Here, potential private lessors and lessees are presently somewhat more willing to rely on presidential decrees than they are for sale transactions (at least when the lease arrangement is only a short-term one and does not engage large interests in reliance on the legal rules). But even here, many pensioners are probably less willing at present to lease out their land share rights to a family farmer who will pay them much more in rent, for fear that the arrangement may be, or become, illegal.

These suggested legal standards are simply the normal rules present in the laws of market economies around the world, including the new market economies of Central and Eastern Europe. Once there is the political will, there is no special difficulty in drafting and implementing such laws.

IV. THE NEEDED FINANCING FOR THE VISION

With the changes in Russian law proposed in Section III, land for the transformation (aside from household's own land shares claimed in kind) can be acquired almost entirely through leasing in, through self-financing of land purchases, or through bank financing where the land being acquired is used as security for a purchase-money mortgage. Apart from the possibility, in the latter case, of some supplemental guarantees to lending banks at the earliest stage (few of which will be called upon), little or no public funding will be required.

In terms of the potential need for additional resources, the largest cost of the transformation by far is the cost of the needed machinery for new and expanding PFE's. If financing for this machinery were made available, the PFE's would almost certainly find the means to finance the other costs (such as inputs and building construction) without special assistance. The point that availability of financing for machinery is the crucial factor is strongly supported by the data from the Serova paper, which shows the dramatic drop in machinery on newly established PFE's that occurred about halfway through 1993, when state-supported credits for new PFE's ran out. The year 1993, of course, was also the moment at which net new formation of PFE's dropped virtually to zero, and stayed there.¹⁶

While the costs for this machinery are significant in total gross terms, it should be kept in mind that there are six important ameliorating factors:

- The costs will be spread over a decade of steady change, not incurred "up front" or all at once.
- Most of the costs will end up being much smaller in *net* terms, since they will involve credits to PFE's which must be repaid, not grants.
- The primary security for new machinery purchases will be the new machinery itself.
- The value added to the transformed agricultural sector will steadily increase, thereby increasing the national tax base. If we conservatively assume an average increase in production of one ton of grain per hectare (or grain equivalent) for just the arable-land portion of the 82 million hectares estimated to be transferred to the PFE sector as of 2010 (about 50 million hectares), the increased value of production would be equivalent to the value of 50 million tons of grain. At \$80 per ton, this is \$4.0 billion, or 96 billion 1999 rubles, a significant amount of which would be revenue which can be taxed. In the early years, most of the taxes raised by this means should be devoted to support the further transformation of the agricultural sector.
- Each year some of the older equipment on the large farms becomes unusable, and very little of it is replaced. As this "decapitalization" progresses, more and more arable land will go out of cultivation entirely. If this land is to remain in cultivation, the equipment will have to be replaced anyway, thus the question is whether it will go to the large-farm/collective sector, or to a greatly expanded PFE sector as part of the process of agricultural transformation.
- Finally, the unit prices for farm equipment shown below are list prices for single items. The program envisioned here would involve financing of massive purchases over a period of years, which could almost certainly be structured so that unit costs are much lower.

¹⁶ Serova, *supra* note 3, Table 5, p. 9; Table 6, p. 11 (English version).

How much machinery will be needed by the new and expanded PFE's projected in Section II of this report? The Serova paper provides the basis for a rough calculation.¹⁷ We will take 1992 as representing roughly "average" equipment needs for PFE's averaging about 42 hectares in size. (Our fieldwork consistently suggests that the relatively small number of PFE's established in 1991 and earlier—49,000—tended to be atypical and overequipped, relative to their size.) We will adjust the 1992 machinery figures upward by 20 percent to roughly account for the needs of 50-hectare (versus 42-hectare) farming units. And we will assume a new-equipment need equal to that for one 50-hectare farm for each of the 270,000 "old" PFE's going from average size of 50 hectares to average size of 100 hectares under the projections of Section II, and the same new-equipment need for all of the "new" average 50-hectare PFE's projected in Section II.

The results of these assumptions are shown in the following table:

Additional machinery needs for PFE's whose expansion
or formation is projected in Section II

Machinery	Number per 100 PFE's <i>(adjusted by 20 percent for 50-hectare farms)</i>	Number needed for 270,000 expanded farms	Number needed for 750,000 new farms ¹⁸	Total <i>(rounded to nearest thousand)</i>
Tractors	90	243,000	675,000	918,000
Trucks	49	132,300	367,500	500,000
Grain harvesters	24	64,800	180,000	245,000
Plows	50	135,000	375,000	510,000
Seed drills	42	113,400	315,000	428,000

¹⁷ *Id.*

¹⁸ We do not attempt to make a separate estimate for the relatively small numbers of new farms projected to be started by heirs directly.

Current list prices for typical Russian-made equipment of these types, and projected total costs, are shown in the following table:

Total projected costs (1999 rubles) of the needed machinery

Machinery	Unit cost (rubles)	Number of units	Total cost (rubles)
Tractors	120,000–200,000	918,000	110-184 billion
Trucks	100,000–120,000	500,000	50-60 billion
Grain harvesters	463,000–600,000	245,000	113-147 billion
Plows	10,000–30,000	510,000	5-15 billion
Seed drills	20,000–30,000	428,000	9-13 billion
Grand Total			287-419 billion

This gross cost would, of course, be spread over the time period between now and 2010. Funding would “revolve,” in that loans for these items of equipment can be expected to be paid off in equal installments over a period of around 5 years.

Total costs of financing new farm equipment for the 1,000,000-plus PFE’s projected to expand or start up in the transformation of Russia’s agricultural sector envisioned in Section II would thus be roughly 300-400 billion 1999 rubles, or the equivalent of about \$12–\$17 billion dollars, if we use full list prices.

To fairly assess this figure, however, we must return to the six important ameliorating factors described at the beginning of this Section. When these are taken into account, we believe it will be seen that only a fraction of this total amount (and spread over the period from now until 2010) would be needed from Russian government or foreign-aid resources to make this entire program feasible. Banks or equipment manufacturers, for example, would have repayment secured by machines worth the entire initial value of the loan. If a substantial guarantee element using public funds were added, it should make such lending virtually “loss-proof” and highly attractive for the banks, equipment-makers, or other potential private financiers. Here it should also be added that PFE’s have been highly reliable in repaying even input loans (which are not secured by machinery or by land).¹⁹

¹⁹ Serova, *supra* note 3, Table 4 and pp. 8–9 (English version). Public financing to ensure low real interest rates will almost certainly be needed, depending on the then-existing interest and inflation rates, though techniques could be used which could reduce nominal rates considerably. However, the cost reductions obtained from the six ameliorating factors should far exceed the costs incurred from partial subsidization of interest.

V. CRITERIA FOR MEANINGFUL RESTRUCTURING OF COLLECTIVE FARMS INTO CORPORATE FARMS

Based on the comparative experience, and given the clear opportunity that should arise out of the interaction of demographic and market forces described above in Section II, the development of the PFE sector offers the best route to meaningful agricultural land reform in Russia over the next decade. However, we recognize that large-scale farms will continue to play a prominent role. If any meaningful restructuring of collective farms into corporate farms is to occur, it must include at least the following three principles:

1. The resulting corporate entity must be dramatically smaller in size than existing collective farms. One of the basic problems with a collective farm is its gargantuan size. If restructuring does not include reduction in size of the collective (perhaps by forming several corporate entities), then the resulting entity is highly likely to continue to be inefficient and unproductive.
2. The resulting corporate entity must adhere to the corporate law which guides its activities. Currently most former collective farms are officially some type of legal entity, usually an agricultural production cooperative, a joint-stock company, or a limited-liability company. As a practical matter, these legal entities are still largely operated as collective farms, and the legal rights of shareholders and workers are not observed. The provisions contained in the federal laws dealing with such activities must be implemented in practice, if the workers and shareholders are to have any role or stake in the operation and success of the entity.
3. The resulting corporate entity should not have long-term rights to land. It is very important that new corporate entities (or cooperative production entities) do not acquire ownership of land through contributions of land shares to their charter capital, and do not receive long-term leases of land from land share owners. If such permanent or long-term surrender of land rights occurs, then land share owners will be unable to respond to opportunities to start their own PFE's, or to lease or sell their land shares to more efficient producers, as opportunities arise.

CONCLUSION

When we began this exercise of crafting a vision for Russian agricultural land reform, we were unsure of where the facts or the analysis would take us. We knew from both Russian and global experience that agricultural land reform in Russia, with focus on the expansion of the peasant farm enterprise sector, was essential for both Russian agriculture and the modernization of the Russian economy as a whole, but we were uncertain (giving ourselves a time frame until 2010) whether we could reach positive conclusions as to the possibilities for such change using assumptions that seemed realistic.

We have emerged from the exercise with a strong sense of the realistic possibilities for transformation that *do* exist, as well as with considerable confidence that a detailed program to get from “here” to “there” *can* be drawn up. Meaningful land reform in Russian agriculture *can* occur, using legal and financial measures that are well within the range of feasibility. All that is needed is the will: but sometimes the knowledge that a goal can be accomplished can generate the will to accomplish it.

SELECTED REPORTS IN THE
RURAL DEVELOPMENT INSTITUTE SERIES

- #99 Agricultural Land Markets in Lithuania, Poland, and Romania: Implications for Accession to the European Union**
Roy L. Prosterman and Leonard Rolfes, Jr. (October 1999)
- #98 Rural Land Reform in China and the 1998 Land Management Law by**
Roy Prosterman, Tim Hanstad, Brian Schwarzwald and Li Ping (December 1998)
- #97 Are Smaller Farms Appropriate for Former Soviet Republics?**
Tim Hanstad (February 1998)
- #96 Land Reform and Farm Reorganization in the Kyrgyz Republic**
Renee Giovarelli (January 1998)
- #95 Agrarian Reform in the Russian Far East**
Bradley Rorem and Renee Giovarelli (October 1997)
- #93 Legal Assistance in Rural Russia: A Report on the Activities of the
“Center for Land Reform Support of Vladimir Oblast”**
Leonard J. Rolfes, Jr. and Bradley Rorem (May 1997)
- #92 Prospects for Peasant Farming in Russia**
Roy Prosterman, Robert Mitchell and Bradley Rorem (January 1997)
- #90 Large-Scale Farming in China: An Appropriate Policy?**
Roy Prosterman, Tim Hanstad and Li Ping (July 1996)
- #89 Land Registration in Developing Countries**
Tim Hanstad (April 1996)

Copies of RDI reports may be ordered from:
Rural Development Institute
4746 11th Avenue N.E., #504
Seattle, WA 98105

Phone: (206) 528-5880 • Fax: (206) 528-5881
rdi@u.washington.edu
