האוניברסיטה העברית בירושלים
The Hebrew University of Jerusalem

המחלקה לכלכלה חקלאית ומנהל
The Department of Agricultural Economics and Management

**Discussion Paper No. 5.01**

# Land Reform and Farm Restructuring in Moldova: A Real Breakthrough?

**by**

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Land reform in Moldova, as in all former Soviet republics, involves the transfer of land from state to private ownership, followed by allocation of individual entitlements to land. Ideally, it also involves restructuring of the traditional large-scale enterprises into market-oriented farming units. The new farming units may represent a wide range of organizational forms, including various associative structures as well as individual farms. The principles of land reform were developed and formulated while Moldova was still a Soviet republic, but the implementation of these principles was made feasible only with the adoption of the new Land Code and the Law on Peasant Farms (December 1991–January 1992). The Land Code set out the mechanisms for the privatization of land, while the Law on Peasant Farms provided the legal tools for the establishment of individual private farms through the process of exits from collective farm enterprises.

Despite an early start, the process of land reform in Moldova advanced very slowly until 1996. The government and parliament lacked political resolve to follow through forcefully on this issue. As a result, administrative support for land privatization and farm restructuring was relatively weak at the beginning of reform in 1992, and the managers of former collective and state farms were reluctant participants in the process of change. The reforms came to a virtual standstill in late 1994 with the passage of laws which added additional bureaucratic and technical constraints to the process. Given the lack of clear commitment by the political leadership, the process of land privatization and farm reorganization in Moldova saw only minimum changes, and retained much of the inherited Soviet-era structures.

The pace of reforms accelerated after the intervention of the constitutional court, which led to the removal, in February 1996, of the previous legislative constraints. The constitutional court ruling provided an impetus for significant, fundamental changes in the organization of the agricultural sector. The current phase of land reform in Moldova has been characterized by the vigorously unfolding National Land Program (NLP). Since its inception in 1997, the NLP has focused on assignment of individual titles to land plots carved out from the large collective fields and distribution of collective non-land assets after first resolving the issue of outstanding farm debt. Moldova today is unique among the Commonwealth of Independent States (CIS) countries in its comprehensive approach to land reform, which combines the processes of land and property distribution with a radical procedure for resolution of the farm debt overhang.

## Changes in Land Ownership

The main features of the process of land reform in Moldova are a dramatic reduction in state ownership of land, virtually complete distribution of land entitlements ("land shares") to the rural population, and rapid acceleration in the physical allocation of land plots to individuals and families who leave the collectivist framework. As of January 2000, peasant farmers operating independently outside collective and corporate structures control 22% of agricultural land, up from 8% only two years ago (**Table 1**). The entire individual sector (independent peasant farms and household plots of rural workers) manages nearly 40% of agricultural land in Moldova, double its share in 1997, and the corporate farm sector is rapidly losing its traditional dominance.

According to land balance data for January 2000, the state retains ownership of 17% of agricultural land, most of it reserve land, which is routinely allocated to various producers for temporary use, pending permanent decisions on future needs. The bulk of agricultural land (83%) is formally classified in private ownership. Private ownership, however, does not mean individual control of land. More than half the privately owned land is managed by large-scale structures, some of which are still registered as traditional collective farms (controlling more than 10% of agricultural land), while others are organized in various new forms, which are basically corporatized shareholder structures with joint, not individual, cultivation of land (joint stock societies, agricultural cooperatives, limited liability companies, etc.). **Figure 1** illustrates the structure of land use in Moldova as of January 2000.

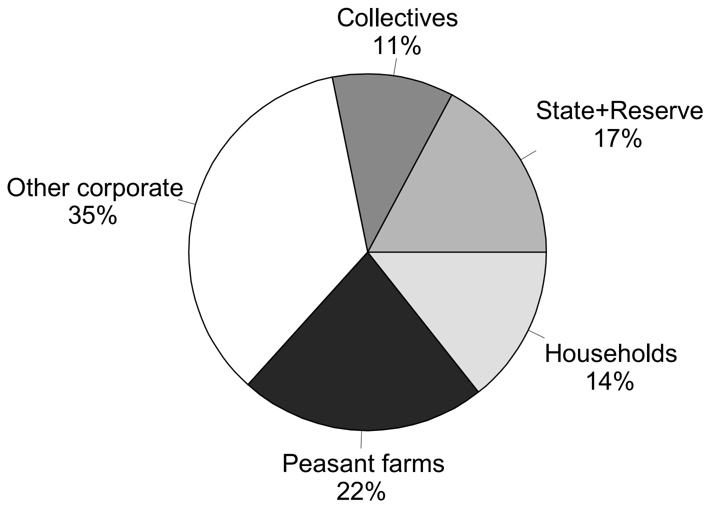
**Table 1. Structure of Land Use 1990-1997 (percent of agricultural land)**

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|
| **State sector** | **32.3** | **26.7** | **25.2** | **31.2** | **30.1** | **16.7** | **17.2** | **17.7** | **17.6** | **17.3** |
| State farms | 27.0 | 23.4 | 20.4 | 14.6 | 12.8 | 0.1 | 1.0 | 1.0 | 1.0 | 1.0 |
| Reserve fund | 0.0 | 0.0 | 0.1 | 12.7 | 13.3 | 13.4 | 13.6 | 14.0 | 14.1 | 14.1 |
| **Corporate forms** | **59.4** | **63.0** | **63.0** | **56.2** | **56.8** | **67.9** | **64.8** | **61.4** | **57.2** | **46.0** |
| Collectives | 59.4 | 63.0 | 58.8 | 49.2 | 45.2 | 39.3 | 23.1 | 15.2 | 13.2 | 10.8 |
| New corporate forms | 0.0 | 0.0 | 4.2 | 7.0 | 11.6 | 28.6 | 41.7 | 46.2 | 44.0 | 35.3 |
| **Individual sector** | **8.3** | **10.3** | **11.7** | **12.6** | **13.2** | **15.3** | **18.0** | **20.9** | **25.2** | **36.7** |
| Peasant farms | -- | -- | 0.0 | 0.3 | 0.7 | 2.4 | 4.8 | 7.8 | 12.0 | 22.3 |
| Household plots | 8.3 | 10.3 | 11.7 | 12.3 | 12.5 | 12.9 | 13.2 | 13.1 | 13.2 | 14.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: Cadastral land balances, end of year data.

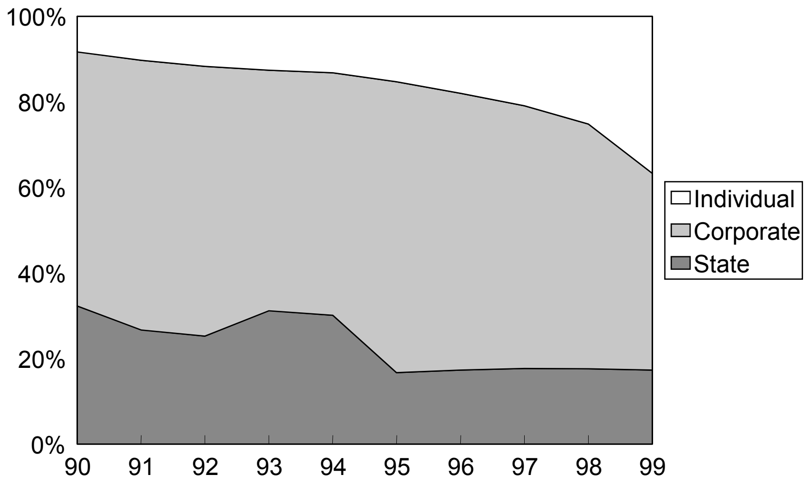
The changes in the structure of land use since 1990 (**Table 1**) reveal a significant increase in subsidiary household plots as a result of the first phase of the so-called "small privatization" in 1991-1992. The state farms practically disappeared during this decade, as almost all of them transformed into collectives and received ownership of their land from the state. Many collectives, in turn, registered in new organizational forms. As a result, the structure of land tenure has undergone a dramatic change: in 1990, state farms controlled 27% of agricultural land and collectives another 60%; ten years later, in 1999, state farms controlled a mere 1% of agricultural land, collectives controlled 11%, and the new corporatized farms that emerged in the process of reform controlled 35% of agricultural land. The share of land cultivated in large-scale farms (state, collective, and other corporate farms) thus declined from 87% in 1990 to 47% in 1999, mainly due to the transfer of land to the individual sector (household plots and peasant farms) and the reserve fund. **Figure 2** illustrates the changes over time in the three main categories of land tenure: state land, collective and corporate land, and land in the individual sector.

Figure 1: Land Use (January 2000)




Source: State Cadastre

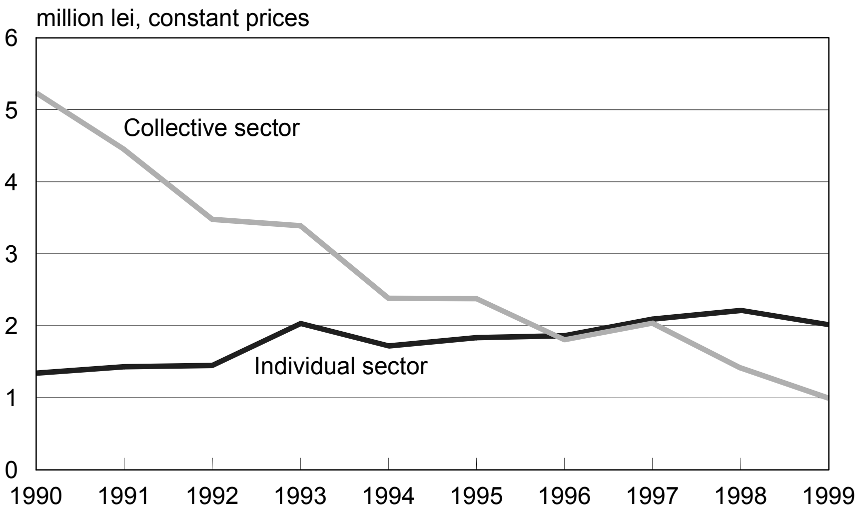
Figure 2: Land Tenure by Sector: 1990-1999




Source: State Cadastre

"Privatization" of land, i.e., transfer of land to non-state ownership, has stabilized. There was practically no change in the proportions of state-owned and privatized land during 1995-1999: state land accounted for a stable 17% of agricultural land resources, most of it in reserve lands. The main changes involved reallocation of land between different corporatized farms, as these re-registered in new organizational forms, and fairly dramatic shifts of resources from corporatized to individual farms. Collective farms as a category lost over 700,000 ha (nearly 30% of all agricultural land) between 1996-1999. Of this amount, 200,000 ha shifted to the category of new corporate farms (mainly agricultural cooperatives and limited liability companies), simply because many collective farms passed a decision to reorganize into these legal forms. The remaining 500,000 ha moved out of the corporate farm sector to the individual peasant farms, which increased their total land holdings almost ten-fold since 1995 through exit of individuals from collectives. The individual sector continued to grow since 1995 at the expense of the large-farm sector, which is clearly demonstrated in **Figure 2**. Creation of peasant farms was not accompanied by a reduction of the reserve fund, which has not changed since 1995. Further reduction of state-owned land will have to come through distribution of reserve lands to individuals.

Figure 3: Gross Agricultural Product: 1990-1999




Source: Statistical Yearbook for 1999

The significant changes in land ownership have naturally affected the production structure of the agriculture (**Figure 3**). While the output of large collective and corporate farms declined through a complex combination of factors that included loss of land and disruption of the old economic order, the output of the individual sector (including peasant farms and household plots) has been growing. In 1996, the individual sector overtook the collective and corporate sector by volume of production. As of January 2000, the individual sector, with only 37% of total agricultural land, produces 67% of agricultural output. So far, however, the output growth in the individual sector has not been accompanied by productivity gains (i.e., increases in output per hectare or per worker), primarily because of lack of adequate reforms in the general economic environment.

## Privatization of Land and Assets

Privatization of land in Moldova began with the process of "small privatization," which resulted in an overall increase of household plots from about 180,000 ha in 1990 to 300,000 ha in 1992. The average size of a household plot increased to 0.4 ha, up from 0.3 ha in the 1990s. This initial phase was followed by the main land privatization program, which affected the agricultural land cultivated by large-scale farm. The "large privatization" program consisted of two stages: (a) distribution of land shares to individuals in the form of paper certificates; and (b) physical allocation of plots of land to individuals or families who wish to start independent private farming.

**Table 2. Procedures for Determination of Land and Asset Shares in Moldova**

| | A. How Is the Land Share Determined? | B. How Is the Asset Share Determined? |
|---|---|---|
| 1 | The farm enterprise adopts a resolution to reorganize and sets up a Land Committee, which includes representatives of local (village or district) government and the enterprise. | The farm enterprise adopts a resolution to reorganize and sets up a Privatization Committee, which includes representatives of the local agency of the Department of Privatization, the local office of the Ministry of Agriculture, the local government, the bank serving the enterprise, and the enterprise workers. |
| 2 | The Land Committee determines the boundaries of the land used by the agricultural enterprise and identifies the land that legally remains in state property. | The Privatization Committee performs complete inventorization, valuation, and indexation of the assets on the basis of the latest balance sheet. |
| 3 | The total farmland available for privatization is reduced by reserving land for the following uses: i) augmentation of the household plots in the village; ii) pastures and meadows in the village; iii) creation of a reserve for future needs of the village; iv) allotments to monasteries and parish administrations. All remaining land is available for distribution to eligible beneficiaries (the privatization reserve). | The Privatization Committee reports the asset valuation to the general assembly. The general assembly determines the proportion of total assets to be allocated to the active and retired workers of the farm enterprise, and the proportion to be allocated to the rural workers and pensioners who live in the village. Assets available for allocation are net of assets set aside for repayment of outstanding debt. |
| 4 | The Land Committee identifies the beneficiaries eligible to receive land shares. The eligible individuals include the active and retired workers of the farm enterprise, handicapped people, teachers, medical personnel, employees of cultural facilities and support services, and other state employees who live in the village where the farm is located. | The Privatization Committee proposes for the approval of the general assembly a formula for determining the value of asset shares for different beneficiaries; the formula generally gives a high weight to the individual s wage rate and years of employment. |
| 5 | The Land Committee determines the equivalent land share by dividing the privatization reserve by the number of eligible beneficiaries in the village. Land shares are calculated separately for arable land, orchards, and vineyards. The land area obtained in this way represents the equivalent share with average soil quality and normal fertility. | The Privatization Committee calculates the value of the asset share for each individual based on the approved formula and reports the results to the farm management, the district office of the Department of Privatization, and the State Property Administration. |
| 6 | The Mayoralty issues an official document certifying the right to an equivalent share of land. | The Privatization Committee issues and registers official certificates of the right to a share of assets. |

Each beneficiary was entitled, free of charge, to a share of farmland of equal standard size, adjusted for quality. Workers of collective and state farms (both active and retired) were also entitled to a share of non-land assets, whose value was to be calculated based on the recipient's past labor contribution to the farm. Asset or property shares, contrary to land shares, were not equal for all. Vines and fruit trees were classified as capital assets, so that both asset shares and land shares were required to claim vineyards or orchards. **Table 2** describes the procedure for determination of land and asset shares.

**Table 3. Distribution of Land Shares: 1996-1998**

| | Oct. 1, 1996 | Apr. 1, 1998 |
|---|---|---|
| Privatization fund, ha | 1,527,888 | 1,530,000 |
| Individuals entitled to an equivalent land share | 1,005,257 | 1,033,994 |
| Individuals with provisional ownership certificate | 907,186<br>90% | 984,136<br>95% |
| Average land share | 1.52 ha | 1.48 ha |

Source: Department of Statistics, Computational Center.

Land privatization through distribution of land shares covered 1.5 million ha out of total 2.5 million ha agricultural land. The remainder was land in household plots, reserve land, and other land in state and municipal ownership. There were 1 million claimants to privatized land, and the average size of a land share was thus about 1.5 ha. The process of distribution of land shares is virtually completed: 95% of individual claimants received provisional ownership certificates as of April 1998 (**Table 3**). Distribution of land shares, however, was "ownership on paper." The owner of a land share did not possess a specific plot of land, and the land plots corresponding to provisional ownership certificates were not marked on any map. To realize their property rights, individuals had to apply to local authorities with a request to receive a plot of land in exchange for the land share they held.

**Table 4. Privatization of Non-Land Assets as of December 1997**

| | Number of individuals | Percent | April 1996 |
|---|---|---|---|
| Individuals entitled to asset shares | 1,094,656 | 100 | 100 |
| Shares calculated | 701,608 | 64 | 37 |
| Certificates issued | 543,406 | 50 | 30 |
| Of these: registered by local authorities | 356,535 | 33 | 12 |
| | Thou. lei | Percent | April 1996 |
| Value of assets for privatization* | 5,128,341 | 100 | 100 |
| Value of privatized assets | 3,016,023 | 59 | 36 |
| Average asset share | 4,685 lei ($850) | | |

*Net of 678,218 thou. lei in obligations. Source: Department of Statistics.

While 95% of individuals entitled to land shares had received at least a provisional certificate of land ownership as of April 1998, only 50% of the individuals entitled to asset shares in large-scale farms had received a certificate of ownership by that date (**Table 4**). Property distribution also was in the form of paper certificates of value, and did not involve division of physical assets. The relative slowness of the process of determination and distribution of asset shares was attributable to technical and legal problems associated with the outstanding debt of reorganizing farm enterprises: asset shares had to be calculated net of liabilities, which caused considerable difficulties in farms with a high level of debt. Such problems did not affect land:

land had no balance-sheet value under the socialist system of accounting and determination of land shares could proceed without considering the implications of debt.

## Financial Situation of the Farm Sector

All through the initial phases of reform, farmers, farm managers, and Ministry of Agriculture officials were complaining about the crushing burden of debt in agriculture. Objective measures of farm indebtedness were obtained from the consolidated financial reports (balance sheet and income statement) of the agricultural sector, including all the large farm enterprises in Moldova that were subject to statistical reporting requirements. This consolidated information did not include family farms and other individual components of the agricultural sector, but their share in sectoral finances was relatively small until very recently. The latest available financial statements for the agricultural sector were for January 1, 1999, representing the situation in 1998.

In 1998 the total obligations of the large farms since 1995 were at the level of slightly over 2 billion lei, or about $400 million. Prior to 1998, practically the entire amount consisted of current obligations, with virtually no long-term debt on the balance sheet. Only in 1998 did long-term debt increase to 17% of the total in connection with certain aspects of farm restructuring efforts. The government was the main single creditor of the agricultural sector, with obligations to the budget (in back taxes and social deductions) accounting for more than 30% of total liabilities. Commercial liabilities to suppliers for inputs and services constituted another 30% of the total. Obligations to payroll arrears and commercial banks were modest (**Table 5**).

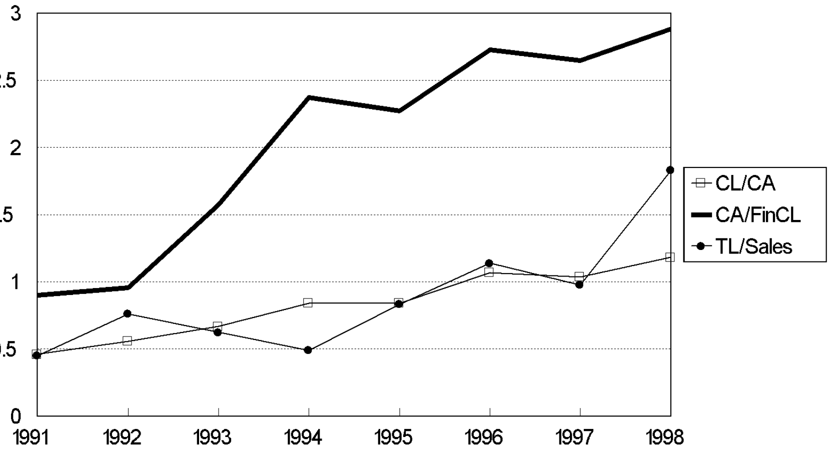
**Table 5. Structure of Farm Sector Debt: 1997 and 1998 (in percent of total liabilities)**

| | 1996 | 1997 | 1998 |
|---|---|---|---|
| Accounts payable | 88 | 90 | 80 |
| Government (taxes and social deductions) | 41 | 34 | 32 |
| Suppliers | 29 | 36 | 27 |
| Payroll arrears | 7 | 9 | 7 |
| Other | 2 | 2 | 13 |
| Short-term loans (banks and government) | 8 | 5 | 4 |
| Long-term debt (banks and government) | 4 | 5 | 17 |

Source: Consolidated financial statements of farm enterprises.

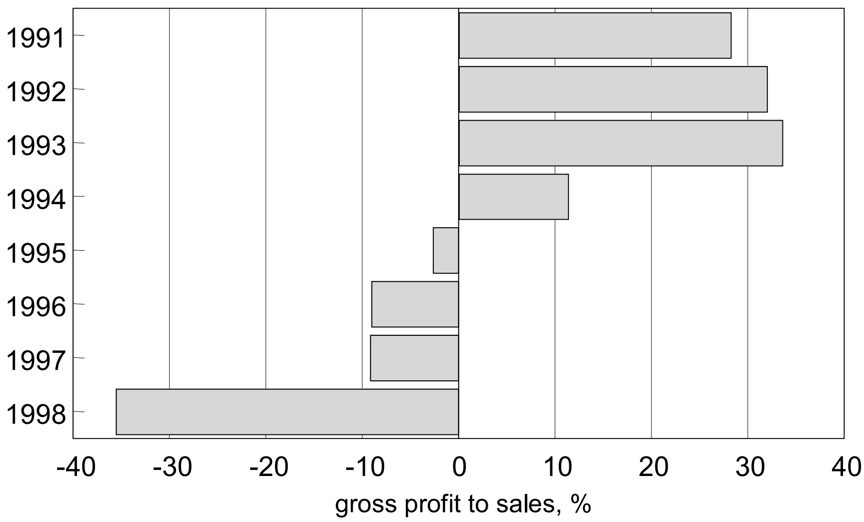
Total obligations of about 2 billion lei were not very large compared to the total value of the assets, which exceed 10 billion lei. However, the book value of farm assets is not a realistic approximation to their true liquidation value, especially as the balance sheet is presented after repeated revaluation and indexation of the fixed assets. A more truthful picture of the financial straits of Moldovan agriculture is provided by the ratio of liabilities to current assets and, more strictly, by their ratio to liquid current assets (which exclude inventories). These ratios represent the ability of the farm sector to repay its obligations from current assets – especially cash and accounts receivable, without attempting to liquidate the highly illiquid fixed assets. Both ratios increase over time, but the so-called quick ratio – the ratio of current liabilities to liquid current assets (without inventories) – shows a particularly alarming trend. It rose from less than 1 in 1991 to nearly 3 in 1998 (**Figure 4**). While in 1991 the liquid current assets in the farm sector (primarily accounts receivable) were more than sufficient to cover all current liabilities, in 1998 the liquid assets covered about one-third of current liabilities.

Moldova Financial Ratios




An additional measure of indebtedness can be obtained by comparing the level of obligations to the annual volume of sales, which is actually the source of earnings for repayment of debt. The ratio of total obligations to sales increased steadily over time, rising to 1 in 1996-1997 and approaching 2 in 1998. This means that between roughly one year's to two year's of sales revenues would be required to repay the total debt, compared to six months in 1994. Since only a small part of sales revenue is available for debt repayment in an operating farm, the actual repayment period is much longer than that suggested by the debt to sales ratio.

Figure 5: Profit Margin in Farm Enterprises



All three indebtedness ratios show consistent deterioration over time, which implies that the level of debt in the farm sector is growing. Technically, the accumulation of debt was caused by the very low rate of sales and profits that farms generated on their large base of assets. Sales of 2.5 billion lei on assets of 15.2 billion lei is very low by any standard in agriculture. As to profits, these evaporated in 1994-1995, when the entire farm sector switched from gross profit margins of about 30% on sales to losses that grew rapidly from –10% in 1996-1997 to –30% of sales in 1998 (**Figure 5**). On a political level, the accumulation of farm debt was made possible by the willingness of the government and the government-controlled suppliers to continue lending to farm enterprises despite their obvious inability to repay their obligations from sales and profits, i.e., obvious lack of creditworthiness. Such was the nature of soft budget constraints inherited from the Soviet system: everybody in the system assumed that eventually the government would "exercise its responsibility" toward agriculture by yet again writing off the accumulated debt.

Farms accumulated debt because they were inefficient and did not generate enough sales and profits. This was an inherent problem of socialist farm structures, and it is only remedied by restructuring the traditional farms to conform to market-oriented principles of operation. Yet restructuring did not proceed smoothly as long as outstanding claims of creditors were not resolved. Moldovan agriculture was in a vicious circle, where restructuring was needed to avoid accumulation of debt, but debt prevented restructuring. The government apparently had to tackle the twin issues of farm restructuring and debt resolution simultaneously.

## The Farm Restructuring Initiative: National Land Program and Debt Resolution Program

When the January 1996 resolution of the Constitutional Court resolved the fundamental conflicts in the privatization strategy and removed the main political and administrative barriers to reform, a number of international donors initiated experimental farm-restructuring programs with the blessing of the Moldovan government. The objective of these programs was to conduct farm-restructuring pilots and ultimately develop a model suitable for dissemination on a national scale. This technical assistance to the Moldovan farm-restructuring effort was offered in the context of similar pilot programs that were already in place in Russia and Ukraine.

The most widely publicized initiatives were the TACIS Orhei project and the USAID Nisporeni project, both named after the respective districts where they were deployed. The approach essentially entailed distribution of individual certificates of entitlement to land and assets. An important feature of the approach was that each beneficiary received a title to a physically identified plot of land. The new "shareowners" were encouraged to regroup voluntarily in associations or cooperatives under democratically chosen leaders. In addition to joining a particular group with their shares of land and assets, individuals always had the option of leaving the collective and establishing an independent private farm.

In Nisporeni District, the farm restructuring procedure was piloted in 1996 in the former kolkhoz Mayak. Of the 2,100 members in Mayak, 1,355 people regrouped to form eight limited liability companies, 120 people formed an association based on individual production and joint services, and 625 people took their land out for independent farming. The limited liability companies, ranging in size from 26 ha to 430 ha, acquired about 45% of the land in the form of equity investment by active shareholders, while the remaining 55% was leased from pensioners and other inactive individuals. The divisible assets of the former kolkhoz (47% of total value) were physically distributed among individuals, but the remaining indivisible assets (53% of total value, mainly buildings and large farm machinery) were pooled in a joint stock company, which rents out the facilities and machinery to producers. The entire debt of the former kolkhoz (about 3 million lei) was also kept in this shell company.

The results produced by the pilot projects were generally evaluated as positive. In 1997, after the Mayak experiment, the USAID-funded pilot was successfully extended to 72 farm enterprises, and in March 1998 the government launched the National Land Program, which constituted a national rollout of the Nisporeni scheme (or the Mayak scheme, as it became known after the first restructured farm) to all large-scale farm enterprises in the country. The farm restructuring program is based on full privatization of land, including physical assignment of plots to holders of land shares and distribution of legal titles, which allows dynamic restructuring and modification of land use. The machinery is divided among the new farming units or pooled in service cooperatives. An important feature of restructuring is that the new units are not committed to continue employing all the members who have formerly worked on the land assigned to the unit. The new units can shed member labor, as long as they continue paying dividends or rent to the owners of land that they cultivate.

It became clear during the pilot projects and the early phases of the National Land Program that the existence of high levels of outstanding debt in some collective farms would slow down the restructuring efforts. Distribution of assets to new entities was being delayed by the unresolved claims of creditors of the old collective farm. On the other hand, new restructured entities could legally be created without resolving the issue of outstanding old debt. The shell companies that retained most of the indivisible assets had no intention of settling the old debt by selling off inherited machinery and equipment, and the new restructured entities could not function normally because some 35,000 unsatisfied creditors stopped deliveries of farm supplies and services. In some cases the frustrated creditors even began to apply informal methods of debt collection aimed both at the shell company and at the new restructured farms.

The government accordingly approved a Debt Resolution Program to be implemented concurrently with the National Land Program. The Debt Resolution Program was launched only recently, in September 1999, after the adoption of the Law on Restructuring of Farms Undergoing Privatization (known in short as the Debt Law). Instead of invoking bankruptcy of insolvent farms, the Debt Resolution Program implements a one-time out-of-court debt settlement linked with farm liquidation and privatization. Its objective is to settle the historical and current debt of each collective farm enterprise before restructuring, liquidate it as a legal entity, and then reconfigure its land and assets in new debt-free entities based on individual member shares. The new entities will be able to function without threats from the creditors of the old collective farm, but they will have to exercise normal financial prudence and discipline to avoid the risk of bankruptcy in the future. The principles of the Debt Resolution Program are summarized in **Table 6.**

Table 6. Principles of the Debt Resolution Program

- $ The objective is to create new farm entities that are free of past debt and have the potential to become economically viable. The goal is not reorganization of existing enterprises, but creation of new debt-free entities that are compatible with market principles of operation.
- $ The decision to launch the debt settlement process in each farm enterprise and the choice of the form of the new entities is left to farm members. The process is supported by sufficient information outlining in detail all implications and alternatives, informing the members of the basic market principles of farm organization and management.
- $ The debt resolution process is managed by a debt-settlement committee appointed by a national body and consisting of local and outside experts. The committee announces the start of the process and collects the claims from the creditors.
- $ Land and movable assets (farm machinery and livestock) distributed in shares to farm members are kept outside the debt resolution procedure. These assets are guaranteed to remain in the hands of the individual farm members, and the guarantee is made credible by the issue of legally binding land titles as the first step of the debt resolution procedure.
- $ The outstanding debt is settled as far as possible from the remaining assets of the farm enterprise: a) social assets are transferred to local municipalities in settlement of the debt to the government; b) enterprise-owned housing is privatized to worker-members in settlement of wage arrears; and c) Inventories, cash, receivables, other current assets, and all farm fixed assets (i.e., storage, farm buildings, processing facilities, etc.) are used for settling the debt of commercial creditors.
- $ All residual amounts remaining after the farm assets are exhausted are settled through the state budget (e.g., by offering future tax credits to commercial creditors with unsatisfied claims).
- $ The process ends with full liquidation of the old entity, without any legal successor, and registration of new entities based on land and asset shares of the former farm members.

## Progress in Decollectivization

Initially, prior to the launch of the National Land Program, the land and asset shares were paper certificates, representing the entitlement of each individual to a portion of total land and total assets of the farm. Individuals could elect to keep their shares in the restructured farm, in which case they were entitled to dividends based on the value of their holdings. Individuals who decided to leave the collective enterprise and establish a private farm were entitled to withdraw land and assets in kind. An intermediate course based on the 1992 Law of Cooperation involved withdrawal of land by the individual, while the asset shares were invested in the equity capital of a service cooperative for joint operation and maintenance of farm machinery and other indivisible facilities.

The National Land Program shifted the emphasis to physical allocation of land and assets to all individuals, including legally binding titling of the land plots. It thus simplified and encouraged the various reconfiguring decisions, be it an exit from the old collective as a private farmer, or participation in a new entity with other members.

*Creation of Private Farms*

As of January 2000, some 350,000 share holders, or about one-third of all beneficiaries, withdrew from the large-scale farms with 570,000 ha of agricultural land. An individual who exits a former collective with a plot of land and a share of productive assets in principle becomes an independent private farmer. Initially, private farmers were required to register as a legal body. The bureaucratic complexity of the legal procedure was a serious deterrent to registration, and as a result only one-third of the individuals who had received a plot of land against their land share actually registered their private farms as legal entities (68,000 private farms among 200,000 individuals allocated plots of land as of April 1998). In 1998, the government amended the Law on Peasant Farms eliminating the provision that peasant farmers had to register as legal persons. Since that time, all peasant farmers with up to 20 hectares are treated as physical persons, and the obligatory registration requirements have been waived for these relatively small farms.

Figure 6: Number of Private Farms and Total Holdings

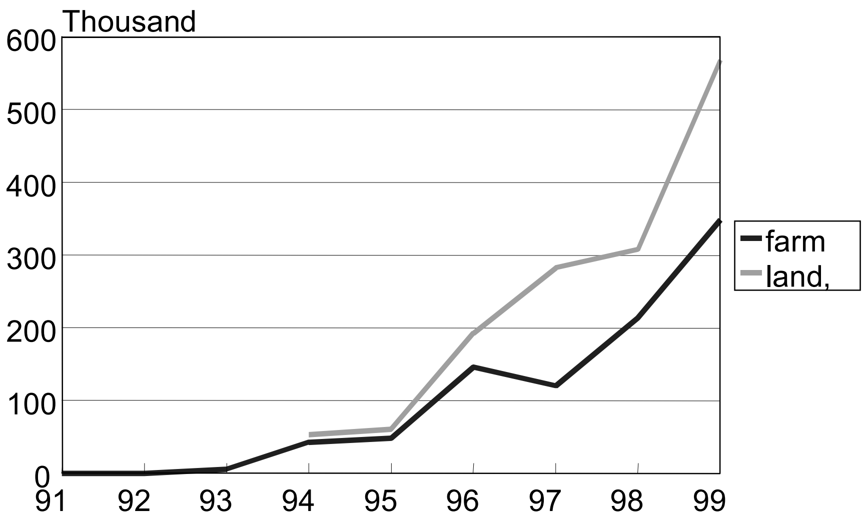



**Figure 6** shows the growth in the number of independent private farms and in their total land holdings over time. There has been a marked acceleration in the creation of new farms since the launch of the National Land Program in 1998. In addition to the increase in the number of private farms, the average farm size increased in the last two years, as farmers began receiving larger allotments based on their land shares. The average farm size rose from 1.2 ha in 1994-1997 to 1.6 in 1999.

The dominance of individual farms in market economies suggests that these farms are probably efficient and profitable despite their relatively small size. A small survey of 150 private farms carried out by ARA – theAgency for Restructuring Agriculture in cooperation with the World Bank in early 1999 shows that private farmers on average earned a positive gross profit from farming in 1998. This is in striking contrast to the continuing losses of large farm enterprises since 1996, as demonstrated in **Figure 5** above. The farms surveyed reported annual average revenue of more than 2,000 lei per hectare, compared with 1,300 lei per hectare for large-scale farms. Farmers working jointly with relatives attained the highest revenues and profits per hectare, while commercially oriented private farms were the most cost-efficient (**Table 7**). Although the average farm in the sample reported a positive profit, there was considerable variability in financial results among the farms surveyed: between 35% and 50% of farmers in different categories covered by the survey reported losses in 1998.

**Table 7. Profit from Private Farming by Organizational Form**

| | Small individual farms | Farming with relatives | Farming in a group | Commercial individual farms |
|---|---|---|---|---|
| Number of respondents | 84 | 25 | 29 | 12 |
| Farm size, ha | 5 | 9 | 193 | 262 |
| Revenue per ha, lei | 2,298 | 3,146 | 1,276 | 1,469 |
| Cost per ha, lei | 1,019 | 1,088 | 828 | 696 |
| Profit per ha, lei | 1,278 | 2,058 | 448 | 773 |
| Profit per ha, $ | $150 | $242 | $53 | $91 |
| Percent of farms reporting losses | 51% | 36% | 41% | 50% |

Source: *Moldova: Agri Support Services Project*, Gap Assessment Report, No. 99/042 CP-MOL, FAO, Rome, 1999.

*Creation of New, Larger Farms*

Out of more than one million beneficiaries of the privatization process, about 700,000 decided not to switch to independent farming. These shareholders entrusted their shares to 'leaders," i.e., enterprising persons who are willing to manage the land and assets of a whole group of individuals. The "leaders" are managers of about 1,000 newly created large-scale farms registered as joint-stock societies, limited liability companies, agricultural cooperatives, and farmers associations.

**Table 8. Farm Reorganization**

| | Number of units as of Jan. 2000 | Number of units in 1991 |
|---|---|---|
| **Traditional forms:** | | |
| State farms | 33 | 389 |
| Other state enterprises | 75 | B |
| Collective farms | 87 | 600 |
| Interfarm cooperatives | 17 | 96 |
| **New forms:** | | |
| Joint stock societies | 185 | B |
| Limited liability companies | 398 | B |
| Agricultural cooperatives | 320 | B |
| Farmers associations | 149 | B |
| **Total large-scale forms** | **1,264** | **1,085** |
| **Peasant farms** | **348,948** | **B** |

Source: Computational Center, Department of Statistics.

A full census of different organizational forms in Moldova as of January 2000 is presented in **Table 8**. A brief characterization of the various organizational forms is given in **Table 9**. Among the new organizational forms, some of the joint-stock societies and agricultural cooperatives are large farms with several hundred members. While the average land share in Moldova is 1.5-2.0 ha, the land holdings of these farms can be estimated at more than 1,000 ha each. Some of these larger farms retain several features of the old-style collective farms. Limited liability companies and farmers associations appear to be much smaller, with 100-200 members on average, and thus constitute a truly new intermediate form between the traditional large-scale farms and the small peasant farms. The situation is highly dynamic, with rapid shifts in size and organizational structure across the entire sector.

**Table 9. Characterization of Organizational Forms**

**Joint-Stock Society (Company):** A business entity created by two or more investors (physical or legal bodies), who acquire shares in the company by contributing funds or assets to its equity capital. A shareholder wishing to leave a joint-stock society has to find a buyer for his share. The company has no obligation to redeem the shares for cash or assets in kind. The shareholder s liability for the company s debt is limited to the investment in share capital. The voting power is proportional to the number of shares held by the shareholder. In a closed joint-stock society, shares are transferrable only among members. In an open joint-stock society, shares can be bought by outsiders.

**Limited Liability Company:** Similar to a joint-stock society, except that when a member chooses to leave, the other members redeem his share of investment for cash.

**Partnership:** The partners bear full, unlimited liability for the obligations assumed by the partnership. When a partner decides to leave, the partnership is usually dissolved and the assets are divided in kind among the partners. The voting power is proportional to the investment of each partner.

**Agricultural Cooperative:** An entity established voluntarily by three or more individuals for the pursuit of a common agricultural activity (production or services). Each member makes a contribution to the statutory equity capital of the cooperative in the form of cash, land, or assets. The ownership of the contributed capital passes to the cooperative, as in a joint-stock society. On exit, members receive their share of investment in cash or in kind, as prescribed by the cooperative charter. The members bear an unlimited liability for the obligations of the cooperative. The voting power is one man, one vote,” and is not proportional to the invested capital.

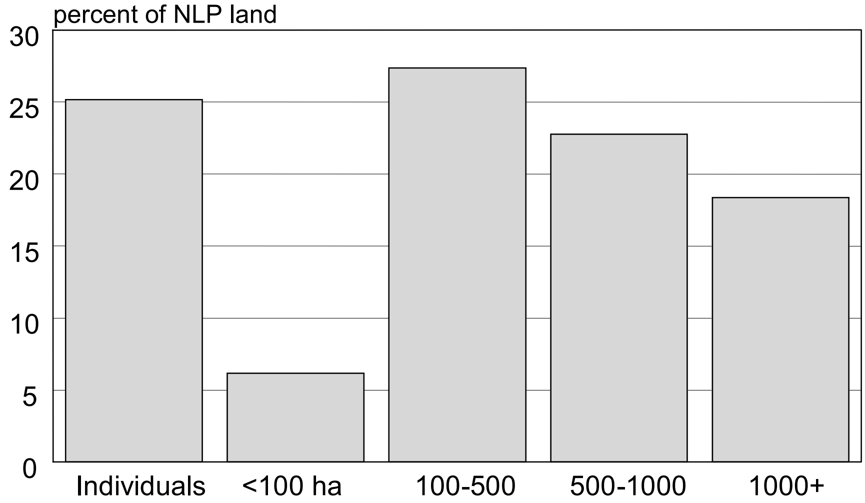
**Collective Farm, Collective Enterprise:** A variety of agricultural production cooperative. Exit of members with land and assets usually requires approval of the general assembly.

**Peasant Farm:** An entity created by a family or a group of families on the basis of privately owned land, possibly augmented with leased land. A peasant farm has the status of a physical body. The land and assets of a peasant farm are the joint property of all its members, and redistribution of assets requires the consent of all members. Farm members bear unlimited liability for all obligations.

**Farmers Association:** Peasant farms may form associations for the pursuit of common agricultural activities. Unlike members of a cooperative, peasant farms in an association keep their independence of decision making, their ownership rights over land and assets, and their status as a legal person. Members are allowed to leave the association at will, taking their land and assets with them. Often, the term farmers association is used not as intended, to represent a voluntary association of independent peasant farms with a common purpose, but as a different name for a cooperative or a collective enterprise.

Today, the total number of farms of various corporate forms is about 1,200, not much different from the number of collective and state farms before the reform. Yet these farms control less than 70% of the land that they controlled previously, which implies that the process of land reform has produced a noticeable downsizing of the corporate (“leader-managed”) farms in Moldova. Farms larger than 1,000 ha currently manage less than 20% of agricultural land, whereas 35% of land has shifted to a new category of medium-sized corporate farms with up to 500 ha (**Figure 7**). The recent land reform efforts in Moldova have smoothed out the sharply dual farm structure that characterized socialist agriculture. Contrary to the Soviet era, when the control of agricultural land was polarized between very small household plots and very large collectives with more than 1,000 ha, there is now a mix of organizational forms in the middle range of farm sizes between 100 and 1,000 ha that did not exist previously.

Figure 7: Land Managed by Leaders: September 2000




**Land Market Development**

One-quarter of agricultural land has been transferred to 350,000 smallholders in the process of land reform. Many of these smallholders remain inactive for reasons of age or health, while others do not have the skills to become an efficient farmer. Mass distribution of small parcels to individuals naturally requires development of land market mechanisms to enable land to flow from less efficient to more efficient users and to allow farmers to adjust the size of their holdings. In the 1997 farm survey conducted by the World Bank and ARA, 40% of private farmers expressed a desire to enlarge their farm. The desired median expansion was 5 ha, but some farmers were aiming to acquire an additional 25 ha or more. Land markets is the natural medium to satisfy this new demand for land.

Buying and selling of land for commercial farming was the subject of an intense political debate until recently, and a law allowing general transactions in land was passed only in July 1997. Yet even this new law, called the Law on Normative Price of Land and Procedure for Sale and Purchase of Land, severely restricted the potential for land transactions. It imposed a very high tax on land sales during the first five years after initial allocation and introduced a transfer tax of 5% of the normative price of land (which was usually much higher than the actual price). These constraints were abolished only in 1998-1999, which signaled the government s readiness to support land transactions.

With the completion of the first round of land titling in May 1998, the USAID farm restructuring project reported sales of land by some 100 individual owners to other individuals or private farms (Robert Mitchell, RDI/USAID, private communication). ARA – Agency for Restructuring agriculture conducted a special study of land transactions registered as of January 2000 throughout the country. The results of this study are presented in **Table 10**. A total of 1,960 transactions had been registered. These transactions cumulatively involved 2,200 ha, or 0.2% of land in the individual sector. Most transactions had taken place in the central zone, not far from the capital, while the land markets in the south are the least developed (**Table 10**). The average price was 3,600 lei per hectare (about $350). The prices in the north were substantially higher, probably due to better soil quality and greater demand from locals and outside entrepreneurs.

**Table 10. Land Transactions: Number, Area, Price (cumulative to January 2000)**

| Districts | Number of registered transactions | Area, ha | Average price, lei per ha |
|---|---|---|---|
| Total | 1960 | 2200 | 3600 |
| Center | 81% | 74% | 3875 |
| South | 2% | 10% | 2025 |
| North | 17% | 16% | 5540 |

The land markets are still very thin. Land transactions were registered in 160 communes out of the total 800. More than half the area traded in these transactions was concentrated in only 19 villages, where the amounts traded varied from 10 to 300 ha per village. In the remaining 140 villages the land areas traded did not exceed 10 ha. As few as 10 persons were responsible for all the largest transactions involving between 50 and 300 ha each, which cumulatively accounted for more than 50% of total land traded. Half of these buyers were outsiders from Chisinau.

Leasing is another important component of land markets that provides a channel for transfer of land to more efficient users and for adjustment of farm sizes. The World Bank/ARA survey carried out in late1997 showed that peasant farms with leased land were, on average, much larger than farms based only on privately owned land. The average peasant farm with leased land had 17 ha, of which 13.5 ha was leased and 3.5 ha privately owned. Farms without any leased land cultivated only 2.8 ha on average. Farmers in the survey reported that they leased land mainly from private individuals. This source accounted for 80% of leased land in peasant farms, and the remainder was leased from local authorities (not from the local collective). The markets for land leasing in 1997 were very thin, much like the markets for buying and selling of land today: only 6% of farmers surveyed reported leasing land. Although no official statistics are available, the land lease market appears to be growing stronger as leaders of the new corporate farms join private farmers in competing for additional land among inactive landowners.

## Conclusion

Land reform and farm restructuring are crucial components in the transition from plan to market. Yet for these processes to succeed, the government must implement a broader program of economic reforms that basically includes the following stages:

- Creation of an incentive system and a conducive macro-policy framework for agriculture: without these actions, even technically efficient agricultural producers will be unable to make profits and will have no funds for investment.
- A one-time out-of-court process for expedited debt settlement preliminary to restructuring: without debt settlement, restructured farms will not be able to function normally. Yet debt settlement must not take the form of still another debt forgiveness or write-off and should be conditioned on genuine internal restructuring and privatization of the farms that goes beyond a “change of the sign on the door.”

- Creation of necessary economic conditions for the recovery of the restructured farms emerging from the debt-settlement procedure: this is linked to the first component in the list, and without attention to the appropriate steps the debt-free restructured farms will simply continue accumulating debt as in the past.
- Implementation of a working bankruptcy system: although farms should be allowed to restructure and continue operating without a debt overhang, it is essential to eliminate moral-hazard behavior in the future by imposing a real threat of bankruptcy linked to irresponsible accumulation of new debt.

Moldova is in the middle of a vigorous implementation of the second of these four components: a full-scale out-of-court debt settlement program linked to farm restructuring is nearing completion. This program has contributed to the accelerated growth of the individual sector and to the changes in the distribution of farm sizes. Now serious attention should be given to the other components of the overall program, namely creation of a conductive macro-economic environment in which the restructured farms have a chance to succeed.

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