

AGRICULTURAL LAND REFORM IN MOLDOVA

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ABSTRACT

During transition, Moldova has pursued a policy of small-scale land privatisation and a succession of decollectivisation initiatives. Small-scale land reform has been important for bolstering the real incomes of rural households but living standards have continued to fall. While initial political resistance to decollectivisation has been overcome, serious challenges remain for co-ordinating agricultural production, procurement and marketing from a newly fragmented structure of land ownership. The delay in issuing formal land titles has inhibited the development of land market. The former large-scale collective and state farms provided several key social services in rural areas and the delivery of these services in the post-collectivised era also represents a serious challenge.

Key Words

Land reform, Moldova, Decollectivisation

1. INTRODUCTION

Under communism, state and collective farms dominated agricultural production in most Central and Eastern Europe Countries (CEECs). During transition, governments have attempted to reform agricultural production systems by pursuing policies of reorganisation, privatisation and / or land redistribution. However, the nature of land policies has varied significantly between countries (Swinnen, 1999). Moreover, these reform policies have typically taken longer to implement than initially thought and have had unforeseen effects (Swinnen and Tangermann, 1999). Land reform is one area of restructuring which has seemed disappointingly slow despite it been perceived as 'an essential cornerstone' in successful transformation (Lerman *et al.* 1998; World Bank, 1998a). This issue has been particularly prominent in Moldova where in 1996 agriculture and the food industries accounted for 40% of GDP and employed 50% of the active labour force (World Bank, 1998b). An evaluation of Moldova's land reform programme and the future challenges posed by the post-collectivised structure of agricultural production is undertaken in this paper, within the context of a wider debate on decollectivisation in the CEECs.

The paper is organised as follows. The next section presents a brief overview of agricultural production in post-Soviet Moldova. The competing arguments for decollectivisation and land reform are presented in Section 3. The reform of agricultural land laws in Moldova is detailed in Section 4. The impact of 'small' and 'large' privatisation programmes is discussed in Section 5 and relevant lessons are drawn out in the conclusion.

2. MOLDOVAN AGRICULTURE SINCE INDEPENDENCE

As part of the Soviet Union, Moldova pursued an agri-food policy based on three main strands: (i) collectivisation and agri-industrial integration, (ii) controlled prices and margins, (iii) and rural industrialisation. The state was the dominant actor in pursuing these policies and production was dominated by about one thousand agricultural enterprises, more than half of which were collective farms (*kolhozes*) (Dumitrashko, 1997). The average size of the *kolhozes* was approximately 3,300 hectares (Table 1). The state farms (*sovkhozy*) tended to be smaller (an average size of 2,000 hectares) with less freedom in decision making than the *kolkozes*. Both the state and collective farms were engaged in activities other than farming such as processing and the provision of social services in rural areas.

Under this regime, Moldova became an important producer of wine and high value-added horticultural products within the USSR. Fertile soils, a favourable climate, well-educated agricultural specialists, and an abundance of low cost labour ensured that agri-food products were Moldova's most important export (Berman, 1996; Institutul Asa Pentru Analiza per Sectoare si elaborari de Politici, 1998). Since Moldova gained independence in August 1991, however, its agricultural sector has been severely depressed. It has faced a series of shocks: a large cost-price squeeze; ethnic unrest; severe droughts in 1992 and in 1994; and the economic disruption associated with the break-up of the USSR and continuing economic difficulties in its three main markets (Russia, Ukraine and Romania) (Berman, 1996). The index of agricultural production in 1998 slipped to only 62% of the 1991 level, and the decline in the livestock sector has been even

more severe (Table 2).¹

3. ARGUMENTS FOR DECOLLECTIVISATION

All of the CEECs, to some extent, have pursued policies of decollectivisation, where the latter can be defined as a transfer of property rights from state and collective farms to individual or corporate ownership. Decollectivisation has been promoted on three broad grounds: claims for historic justice, improving agricultural efficiency and ensuring food security (Table 3). Each of these arguments is connected with certain mechanisms for land reform and potential conflicts.

The most popular method of land reform for collective farm land has been restitution to former owners. For example land has been restituted to previous owners and their heirs based on the structure of land holdings in 1947 and 1948 in Romania and Hungary respectively (Swinnen, 1999). In Latvia and Lithuania, land was restituted on the basis of the 1940 land register. The argument for restitution is based on the premise that land was unfairly expropriated and that the main beneficiaries of reform should be those that lost the right to land under collectivisation.

Restitution has, however, presented a set of problems. The pre-Communist land structure in many CEECs was extremely fragmented, especially after the land reforms of the early 20th Century which attempted to break ties with the feudal past and deal with political pressures for

¹ Official data, however, should be treated cautiously. Prior to decollectivisation, the Moldovan Department of Statistics surveyed all state and collective farms. State and collective farms were obliged to provide information on output, sales and financial performance. A ten per-cent sample of peasant farms was also taken, recording the size of crop areas, yields and gross margins. Local administrations of rural areas conducted an annual inventory of livestock. The transformed state and collective farms are obliged to provide similar information. However, surveying does not include farmers that have received land but not registered their farm. In addition, some farmers deliberately underestimate production to avoid paying taxes and fees. As a result is likely that official statistics underestimate agricultural output but no one denies that production has fallen sharply since independence (Orlova, 1998).

redistribution (Mathijs, 1997). Restitution has thus promoted fragmented ownership especially where land is divided up between heirs. In a number of cases the land registers on which restitution has been based are incomplete (Davis, 1997), leading to lengthy legal disputes. Many of the heirs are not engaged in agriculture, have no sector specific skills or even resident in the country (Abele, 1998). This has led to claims that restitution inevitably leads to fall in productivity, although this may be lessened where effective land markets (both sales and rental) occur (Barzel, 1989).

Where collective land is restituted, a number of key decisions must be taken. First, if a collective farm is broken up and shares apportioned to previous owners or heirs, the ability to exit the farm and the right to land and non-land assets must be specified. Most decollectivisation policies have allowed beneficiaries to exit and pursue private farming but schemes have varied as to their entitlement to non-land assets and the degree to which beneficiaries are entitled to receive exactly the piece of land previously owned or the right to an equivalent area of land. This has been a particularly sensitive issue where some beneficiaries have wished to remain in a transformed collective farm, preserving a viable farming unit, and others have wished to exit. The distribution of non-land assets is particularly contentious as most of these will have been developed or purchased after collectivisation.

A second set of considerations surrounds the rights of collective farm workers who have no direct claim to land based on pre-collectivisation land registers. In a number of countries (e.g. Lithuania, Hungary) land reform programmes have attempted to provide these workers with shares or rights to assets. Agricultural workers are likely to have more sector specific human capital than heirs *per*

se but their claims for historic justice have received widely varying support (Bezemer, 2000). Finally with regard to restitution strategies, in some cases the procedures for the exact proportion of assets was left to the collective farm or its successor form to organise. This has led to problems with managers manipulating procedures to gain an advantage (Davis, 1997).

The second set of arguments for land reform rests on the assumption that privatisation can improve efficiency. The debate concerning the economic effects of land reform has a long history (Cline, 1970). Land reform may promote higher production to the extent that the new farms created make a more intensive use of land. This greater intensity could result from removing a principal - agent problem, as the effective supervision of hired workers may be costly and practically difficult because of the spatially dispersed nature of agricultural production.² Private ownership may also provide greater incentives for effective management. Arguments for land reform based on efficiency, rather than historic justice, will tend to mechanisms based on privatisation rather than restitution. On these grounds it is argued that land should go to those which will farm it most efficiently, with auctions the most effective way of allocating resources (Csaki, 1998).

If land reform on the basis of privatisation is pursued, another set of political decisions arise. First, a decision must be made as to the division of farms into lots. Farms can be sold as an integral unit or after restructuring into smaller units. Non-agricultural privatisation has often followed the latter approach based on the premise that socialist enterprises were inefficiently large with widespread diseconomies of scale or if privatised intact they could gain monopoly rents (Blanchard, 1997).

For agriculture, coming to a judgement as to the optimal size of a farm is very difficult, especially as the cost curves of individual producers will be moulded by the institutional environment in which they operate (Schmitt, 1991). Privatisation may also lead to widespread social and political concerns. Most CEECs have restricted the rights of foreigners to own land on the grounds of political and national security. Moreover, given the degree of overemployment in state and collective farms, profit oriented enterprises have cut labour and unemployment levels in rural areas have risen, leading to social tensions (Wegren, 1997).

The final set of arguments for land reform have been that in an era of sharply contracting economies and growth of poverty, access to land can be an important way of ensuring food security. If one wishes to promote food security, land reform programmes based on mass distribution may appear attractive. Schemes that benefit large numbers of households may also appear politically attractive. Land reform was a major issue in the 1992 general election campaign in Romania and political pressures to benefit the mass electorate influenced the choice of land reform mechanism adopted in the 1991 Land Law (Jackson, 1997). In countries where real incomes have fallen sharply and unemployment high, own production of food may appear an attractive option for bolstering real household incomes. For example, subsistence production is of particular importance in the former Soviet Union. Caskie (2000) reports that sixty per cent of Russian households produce a significant proportion of their own food needs and in 1996, seventy-seven per cent of the total production of fruit and vegetables in Russia was accounted by household production (OECD, 1997).

² For a discussion of the literature on productivity and land reform see Buckwell and Davidova (1993).

Land reform based on the mechanism of mass distribution does, however, present a series of problems. The mass distribution of land will lead to extremely fragmented patterns of ownership and subsistence agriculture in the region is highly inefficient. For food processors, fragmented agricultural production presents a number of problems including high transaction costs, greater risks surrounding the reliability of deliveries and poorer quality output (Gorton *et al.* 2000). There is also a danger that households will become 'locked in' to subsistence production (Bezemer, 1999). Following Chayanov (1966), when the consumer and producer functions of households are united the incentive structure of the household is fundamentally altered. This can lead to a situation where the opportunity costs of home production have to increase disproportionately compared to the initial situation in order to achieve a re-commercialisation of food production and re-specialisation of labour (Bezemer, 1999).

The prominence of these competing arguments for land reform has varied from country and so has the nature of decollectivisation. However, for the consideration of agricultural land reform in Moldova it is important to note there are trade-offs between each of the three rationales for decollectivisation. For example, a scheme to ensure food security may promote a mass land redistribution programme to households but this can create a fragmented, high transaction cost structure that weakens international competitiveness. As discussed below, these tensions between the objectives of decollectivisation have been particularly acute in Moldova.

4. THE REFORM OF AGRICULTURAL LAND LAW IN MOLDOVA

The first stages of land reform began before independence. Between November 1989 and March 1990 the USSR Supreme Soviet passed laws permitting individuals to gain long-term leases (but

not purchase) land within and outside collective and state farms (Lerman *et al.* 1998). Since independence a raft of land reform initiatives and legislation has been implemented (Table 4). As Table 4 indicates, each year (up to 2000 and apart from 1993) saw new legislation enacted and the operating environment for agriculture has been unstable.

Post-Soviet land reform initiatives in Moldova can be divided into two groups. First, under a 'small-scale' privatisation programme, each family in rural districts was given at least 0.3 hectares. If the family comprised of more than 3 members, 0.1 hectares was granted for each additional member subject to a maximum allocation of 0.75 hectares. The total area allocated under this scheme totalled by 1999, 344,500 hectares and this programme has almost been completed (although there has been significant delay in the issuing of certificates of ownership).

The second set of schemes focussed on reform of the state and collective farms. In this field, the first significant pieces of legislation were the Land Code (December 1991) and the Law on Peasant Farms (January 1992). The Land Code set out a framework for privatising the collective and state farms and to whom land rights would be assigned. The beneficiaries were defined as 'the members and workers of collective and state farms, including pensioners, all administrative and professional staff, and workers of the social sphere employed by the farm enterprise' (Lerman *et al.* 1998: 45). It was explicitly stated that workers should benefit rather than those who owned land prior to collectivisation, which had occurred in the early 1950s after Moldova's incorporation into the USSR.³ The Law on Peasant Farms provided a framework for members to exit collective farms and receive a share of its land to pursue individual farming. However, while members were

allowed to exit collectives, a moratorium on land sales was imposed until 2001.⁴

Under this legislation, land and asset shares were paper certificates, which granted individuals an entitlement to a portion of the total land and total assets of the farm. Individuals could either elect to keep their shares in the farm or leave the collective enterprise and establish a private farm on the land and assets they were allowed to withdraw. If a member elected to leave the collective they had to register as a private, individual farmer. This was a very bureaucratic process and registration rates were low.⁵

These two major pieces of legislation have been significantly amended since they were first enacted. The Law on Suspension of Some Articles of the Land Code was introduced in November 1994. This suspension was followed by new procedures being enshrined in the Law on Amendments to the Land Code (February 1995) (Lerman *et al.* 1998). The latter introduced three major changes. First, members could only exit the collective farm if they formed a group large enough to be entitled to one crop rotation field (approximately 100 hectares and 70-75 people). In effect members could only exit if they agreed to manage the land in smaller 'collectives.' Second, the exit of these new groups of farmers could only be approved if the head of the new organisation was suitably qualified and had formal qualifications in farm management. Finally, the entitlement to land was extended to all workers (rather than just members and

³ Pre-collectivisation landowners were only entitled to a plot of land if they explicitly promised to resume active farming.

⁴ The Law on Normative Price of Land and Procedure for Sale and Purchase of Land, adopted in July 1997, lifted this moratorium but stipulated that farm land could not be re-sold within five years of the initial acquisition. It is still illegal for foreigners to purchase land.

⁵ By April 1998, only 68,000 had registered their private farm against 200,000 individuals who had been allocated plots of land under these reforms.

pensioners of collectives). This modification was granted after complaints that other rural workers were discriminated against in a time of falling real incomes and widespread poverty.

However, when the Constitutional Court ruled that the first two measures (minimum land size for exit and certification of competence) were declared unconstitutional in January 1996 they were annulled.⁶ This did not, however, speed up decollectivisation which remained a very lengthy process and which up to 1997 required the agreement of district authorities (many of whom were opposed to land reform). Partly in response to the slow pace of land reform, a new National Land Programme (NLP) was launched in March 1998. The programme followed a pilot scheme funded by United States Agency for International Development (USAID).

The pilot project began with one farm enterprise in 1996 and was extended in 1997 to cover the privatisation and reorganisation of 72 former state and collective farms. As part of the NLP the pilot procedures have been extended to 550 agricultural enterprises. There are three main stages in the National Programme:

- a) *Initial Steps for Privatization and Reorganization.* This stage involves the farm holding meetings with mayors and farm directors and all individuals entitled to land and/or property;
- b) *Farm Preparation.* At this point those entitled to land shares should discuss the options that are available to them and choosing their preferred course of action for restructuring.⁷

⁶ The granting of land to non-collective farm workers was not annulled. This meant that entitlements to land had to be recalculated with a reduction in the mean size of land granted to collective farm workers.

⁷ For authorisation a 50% vote in favour of privatisation is required (75% in the case of farms having converted into joint stock companies).

This involves working with the land commission to compile a list of those eligible for land and determining shares and issuing land share certificates. A similar process should run concurrently with the property commission to establish those members who are entitled property and conduct a property inventory as a basis for issuing property share certificates;

c) *Land and Property Distribution*. This final stage involves the actual distribution of land and property and the creation and registration of new enterprises.

However, it should be noted that the full procedure still involves some 100 steps from authorisation for reform to the distribution of new land and property shares.

The distribution of land and property has been subject to varying entitlements for different types of collective members. *Land shares* have been distributed equally to farm members who were employed in the enterprise on the 1st January 1992 or to their inheritors. Under this process individual land shares have averaged 1.5 hectares. However, social sector workers employed by the collective farms, such as teachers and doctors, have not been entitled to land. While farms may elect to give such workers half shares most have elected not to grant this concession. In deciding who gets which piece of land a tendering process has been implemented. Under this process land has been divided into three types: arable, vineyards and orchards. Managers have attempted to decollectivise in a way that maintains the integrity of individual fields with farm members bidding together for particular 'lots'. The distribution of *property* has diverged from the allocation of land on two counts. First, the amount of property a member is entitled to has been governed by years of service and salary. Second, social sector workers have been eligible to receive automatically property shares (IMF, 1999).

5. THE IMPLEMENTATION OF LAND LAW AND LAND REFORM

The impact of these legal reforms can be analysed by considering the small and large privatisation programmes in turn.

Impact of Small Privatisation

The small privatisation scheme resulted in a significant increase in the number of household plots and their coverage of land area: from 180,000 hectares in 1990 to 300,000 hectares in 1992 (Lerman *et al.* 1998). The distribution of these small plots has been important for bolstering food security in a period of harsh macroeconomic contraction. While data is patchy, an insight into the importance of household plots is gained from village studies conducted by the *Agentia Pentru Restructurarea Agriculturii* (ARA).

In September 1999, the ARA conducted a series of surveys to evaluate the level and sources of rural income and expenditure. Three villages were sampled, stratified by occupation type, from the Edinet, Chisinau and Cahul Judets. The importance of household plots is indicated in Table 5, which considers sources of cash and in kind income in these three villages. Household plots accounted for, on average, 32 per cent of total real household income against just under 18 per cent for salaries. Vegetables, fruit, maize and pig rearing are the main types of production on these plots, with maize cultivated as the main component of animal feed.

The importance of self consumption helps explain why despite the considerable decline in the purchasing capacity of the population, resulting from the change in their incomes and consumer prices, consumption of food products has not significantly decreased. Less than one-half of food

products are purchased and access to land has been important for ensuring food security especially for pensioners. The value of pensions is very low in Moldova and payments have been subject to long delays (IMF,1999). It should be noted, however, that even with own production incomes in Moldova are very low. World Bank projections show that over half of Moldovan adults earn less than \$200 per year (World Bank, 2000). On the evidence of Table 5, the value of in kind food production averages just over \$400 per year, per household. While household food production is important it does not provide freedom from poverty and its importance in many ways represents a symptom of poverty rather than its cure.

Impact of Large Privatisation

The privatisation of large scale farms proceeded slowly until 1996. Political support was weak during this period and ground to a halt between 1994 and 1996 as the Moldovan parliament was dominated by the Agrarian Democratic Party (ADP). Senior positions in the ADP were filled by collective and state farm managers who were largely against privatisation (King, 1996). Only after the removal of impediments, ushered in by the ADP, in February 1996 was the reform process renewed (ARA, 1998).

Prior to 1996 some of the state and collective farms had transformed themselves into co-operatives and joint stock companies (Table 6). For example between 1994 and 1996 the number of joint stock farming companies and co-operatives increased from 36 and 65 to 160 and 194 respectively. During the same period the number of state and collective farms fell from 358 and 535 to 236 and 395 respectively. However these legal transformations were not accompanied by significant downsizing and fragmentation despite the new legal forms guaranteeing the members

the right to exit with land and assets. This meant that by 1997 there were still around 1,000 large farms each with between 1,000 and 2,000 hectares - a very similar structure to the pre-reform period.

However the legal shift meant that according to land balance data for land tenure in 1997, 82 per cent of agricultural land (2.2 million ha) was in private ownership (ARA, 1998). Yet, 61 per cent of this land in private ownership was managed by large-scale farm enterprises, registered either as traditional collective farms (387 thou ha), or joint stock and limited liability companies and agricultural co-operatives (ARA, 1998).⁸ This led some to conclude that Moldova had made progress toward the aim of private farming but while the legal form of the farms changed, the management of collective farms, joint stock companies and co-operatives remained unchanged.

There are two main reasons as to why members did not take up their rights to exit with land and assets from the transformed enterprises. First, the legal procedures to exit were complex and required an intimate knowledge of the legislation and entitlements to exit. As most large farm managers were opposed to decollectivisation they did little to inform or encourage members to pursue this course of action (Petrick, 1999). Pensioners, who formed a large percentage of members with significant entitlements because of their long employment, were often placed under considerable pressure to remain in collectives. This pressure was largely successful, as pensioners were less well informed and often physically unable to farm independently (Dudwick and Youssef, 1998). There was a widely held perception that those that left would be given inferior land and

⁸ By 1997, state farms controlled 1% of agricultural land, collectives 15%, and the new corporate farms 46% of agricultural land (ARA, 1998).

'marginalised' within closely knit village communities (Le Seelleur, 1999).

Second, collective farms received preferential access to state controlled inputs and subsidies in a period of low or negative agricultural profitability. Direct and indirect subsidies were substantial, especially during the period 1994 to 1996 (when agricultural policy was controlled by the ADP). State and collective farms were permitted to generate large payment arrears (amounting to more than 2 billion Moldovan lei (nearly 20% of GDP) to: the state budget, *Tirex Petrol* (the state fuel company), *Fertilitatea* (the state fertilizer supply company), *Cereale* and *Livada* (food storage firms) and *Moldenergo* and *Moldovagaz* (IMF,1999). In contrast rural credit markets for independent farming were weak. Independent farmers, lacking access to land registration titles and thus real collateral, were at a significant disadvantage.

In an attempt to overcome some of problems of previous restructuring strategies, combined with considerable pressure from international donors, the NLP was officially launched in March 1998. This was aided by the performance of the ADP in the 1998 parliamentary elections where they failed to win any seats, thereby removing the collective farm managers which had dominated politics since independence (King, 1999).

By October 1999, 907 farms had applied to the Department of Privatization and State Property Administration, to participate in the NLP.⁹ Ninety per cent of these farms had held their general meeting and voted to privatise. By this date, over 750 farms had completed their lists of people entitled to land and property, and 510 farms had completed their land and property “tenders” (the

⁹ Some have already completed the process.

central process in the critical stage of distributing land and property) (IMF, 1999). The outcome of this decollectivisation drive was to create nearly 800,000 land titles for over 280,000 new land owners.

While the NLP has been successful from the perspective of effectively implementing a policy of decollectivisation, a number of long-standing issues concerning property rights and the structure of production remain. These include debates about farm efficiency, the provision of social services in rural areas, inherited debts, the balance between regional and national decision making and access to credit.

One of the largest fears surrounding decollectivisation is that in the drive to break up the ruling conservative coalition, agricultural production would become fragmented with increased costs and inefficient mechanisation. There is some evidence for this from the ARA (1999) study which found that farmers' land holdings are fragmented: 75 per cent of farmers reported that their land was divided into between three and six parcels, and 10 per cent reported having more than six parcels of land.

In an attempt to limit fragmentation, the NLP has promoted the emergence of 'leaders' to re-amalgamate land plots through leasing arrangements with other ex-large farm members. The "leader-entrepreneur" concept is meant to promote private sector farming with a transfer to the most efficient managers (ARA, 1999; IMF, 1999). This is intended to benefit those unable to physically farm (especially pensioners) to be able to obtain rental incomes. Of the seventy-two farms which participated in the pilot programme for the NLP, an average of around five leaders,

each of whom lease between ten and one hundred land shares (equivalent to between fifteen and 150 hectares) have emerged. These new 'entrepreneurs' have tended to rent land as the process for completing the sale of land has been slow and ex-large farm members have tended to pursue 'a wait and see policy' rather than immediately selling their newly obtained land and assets. While these entrepreneurs have consolidated holdings there are still significant transactions costs in dealing with a large number of owners.

Large-scale agricultural enterprises played a significant role in the provision of social services in the rural regions of the former Soviet Union. Local public administration authorities depended on agricultural enterprises located in their territory to provide kindergartens, schools, village halls and medical facilities. The provision of these services has been highly problematic in the post-communist era. As the large farms became unprofitable investment in new rural social services fell dramatically and existing services fell into disrepair (Table 7). The fall in social provision has affected those worst off in rural Moldova - pensioners, disabled and children (Dudwick and Youssef, 1998). The separation of agricultural policy advice from social provision has meant that these vital services have tended to be ignored in debates about land restructuring. Initial policy advice by international agencies focused on decollectivisation as a way to promote a more efficient structure of farming but ignored the fact that there was more to Moldova's large farms than agriculture.

In an attempt to alleviate this problem and tackle the problem of agricultural debts, the Moldovan Parliament enacted legislation to restructure farm debts by swapping the farms' social assets (such as schools and roads), together with shares in processing enterprises, for historical debts to the

state in May 1999 (ARA, 2000). While this may reduce inherited debts a question remains as to how Moldova provides rural social services with a constrained fiscal situation and an inappropriate and highly run down infrastructure for support provision. While the swapping of shares in processing enterprises for debts attempts to 'wipe the slate clean' for post-collective farms, if the rationale has been to remove the state's involvement in the agro-food chain, one consequence of decreasing involvement at the farm level has been to increase the amount of assets owned by the state at another. Debts owed to private creditors, under the May 1999 law, have been removed from balance sheets by offering tax credits to private creditors.¹⁰ However, the granting of tax credits only reduces the ability of the public sector to generate income to pay for social services (the largest component of government spending).

Participation in the NLP has been high except in two regions of Moldova: the Dnestr (Transnistria) region to the east and the Gaganz Yeri autonomous region in the south. By January 2000, no farms in either region had participated in the NLP due to the special arrangements in these areas. Transnistria is an autonomous republic with its own constitution, president and currency governed largely by ethnic Russians from Tiraspol (Figure 1). A series of agreements to end a bloody conflict over the territory in 1992 have led to the creation of this 'special autonomous republic within a common state' (O' Loughlin *et al.* 1998). In Transnistria economic reform has been very minor. Political leaders in Transnistria have looked to Moscow and delayed reforms in the region to preserve their own political and economic power. They have retained strong links with Communists in Russia and opposed Moldova's independence from the Soviet

¹⁰ Debts older than three years are automatically written off without recourse to creditors.

Union.¹¹ In asserting their independence, they have refused to take part in the NLP as this would weaken their own power base and admit an involvement in Transnistrian affairs by Moldovan authorities which they wish to deny (Tkach, 1999). The Gaganz Yeri autonomous region, created in 1995, has its own local government with wide ranging powers over economic matters (but not currency control or circulation). The Gaganz are a Christian Turkish group that migrated from Bulgaria in the early nineteenth century. Again Gaganz leaders have sought to maintain their own local power base and limit involvement by national policy makers. While the NLP has not been introduced in either region, references to the two regions are noticeable in their absence from the policy documents of international agencies. This highlights the fact that there is often a conflict between agricultural policy initiatives, which treat Moldova as a single entity, and the enforcement of policy in a devolved, and in some respects fragile, state.

While the the number of individuals applying and receiving land in physical form rapidly increased due to the NLP, the provision of land titles has been much slower. Most peasants have received an internal certificate that entitles them to a share of land in the restructured collective farm. However, only 20,000 out of a potential 1 million title-holders have received a final title document. Even among the independent farmers, who already control their own land, less than ten per cent have a formal title. The slow issuing of formal titles has limited the development of land markets, as formal property rights are still uncertain. The amount of land sold remains insignificant and leasing arrangements have been largely informal. While uncertainty persists over

¹¹ For example, in July 2000, the vice-president of the Dniestr enclave, said that 'Transnistria tends to a union of Slavonic nations, while Moldova wants to get out of the Slavs' influence; and as we are collecting signatures to join the Russia-Belarus union - Moldova signs documents with NATO; as Transnistrians are seeking Russian citizenship, Moldovans apply for Romania's' (Basa Press, 2000)

ownership it is impossible to use land as collateral for mortgages. The development of private sector credit markets in Moldova has been problematic and the former system of directed loans to collective farmers to purchase inputs has not been effectively replaced (IMF, 1999).

Banks thus face the same problem as government agencies in the provision of agricultural extension services. When production was dominated by the 1,000 or so large farms bipartite negotiations and co-ordinated action was possible. A clear and relatively small set of decision makers were apparent. However, in breaking up these arrangements private and public agencies are struggling to find ways of dealing with hundreds of thousands of owners (only some of which manage land) in a period of persistently uncertain property rights.

6. CONCLUSIONS

Land reform has formed a major component of agricultural policy in post-Soviet Moldova. Returning to the theoretical arguments for land reform, small-scale privatisation has been justified mainly in terms of improving food security. This has been important in an era when the formal economy has sharply contracted. In rural areas cash incomes often amount to only 20 per cent of total family income (Le Seilleur, 1999) and non-marketed farm production is typically the largest component of real rural household incomes. The growth of small-scale plots has however only acted as a means of improving food security, rural poverty remains persistent and widespread. The majority of rural Moldovans are very poor and locked in to subsistence production in the absence of other income generating activities. Small scale, subsistence production is a symptom of poverty and not its cure. The allocation of up to 0.75 hectares does not in itself provide the means for a decent standard of living.

After significant initial political resistance, the privatisation of large-scale enterprises has also promoted mass ownership of land and of particular concern, the extreme fragmentation of use. As a result, while many of the impediments to decollectivisation have been removed, Moldovan agriculture still faces a number of serious challenges.

It is essential that future policies be geared toward the re-amalgamation of land plots (either through sales or rental agreements). This must be encouraged to improve the efficiency of the Moldovan agricultural and food processing sectors. The development of the latter will depend on the ability to revert from subsistence production to the generation of marketable agricultural surpluses. Minimising the barriers to the sale and leasing of land should stimulate the co-ordination of agricultural production. This is particularly important given that high transaction costs would be prohibitive in a period of low profitability for agriculture. It will be essential that either the entrepreneurial leaders envisaged under the NLP or new co-operative arrangements emerge. There is little evidence that new independent farmers are effectively co-operating informally in the use of agricultural equipment or in marketing their products (Dudwick and Youssef, 1998).

An important lesson of the Moldovan case is that when property rights remain fuzzy and formal entitlements not granted land markets will remain weak. A market for land requires an effective (and costly) land titling and registration system. While decollectivisation may lead to the state's withdrawal from farm ownership it cannot be accomplished without significant public sector resources, especially where the chosen means of privatisation creates a mass of hundreds of

thousands of new owners.

The break-up of the large scale farms has also presented the problem as to how can the social services, previously provided by the agricultural enterprises, be best delivered in rural areas? The Moldovan government faces the challenge of dealing with an often isolated, rural poor living in widespread poverty with severely constrained public sector resources and a wholly inadequate and dilapidated infrastructure. As a result, crucial to the long-run fortunes of rural Moldova will be the stimulation of alternative enterprises outside of agriculture. The challenges of post-collectivisation in Moldova are thus not solely agricultural but also include the provision of former collectives' non-agricultural output.

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Table 1: The Structure of Pre-reform Agriculture in Moldova

Year	State Farms			Collective Farms		
	Number	Average size (ha)	Total area (1000 ha)	Number	Average size (ha)	Total area (1000 ha)
1980	353	2,203	778	392	3,414	1,338
1982	435	1,998	869	367	3,300	1,211
1984	427	2,065	882	368	3,300	1,214
1986	484	1,811	877	369	3,272	1,207
1988	470	1,855	872	375	3,222	1,208
1990	400	na	na	534	na	na

Source: USDA (1993)

Table 2: The Moldovan Agricultural Sector (1991-1998)

	1991	1992	1993	1994	1995	1996	1997	1998
Index of gross agricultural output (1991 = 100)	100	84	92	70	72	62	69	62
of which private (%)	24	29	38	42	43	51	51	61
Index of animal production (1991 = 100)	100	80	65	61	59	57	53	53
animal production as % of total output	38	36	26	33	31	34	29	33

Source: Moldovan Economic Trends (1999)

Table 3: Arguments for Land Reform in the CEECs

Argument	Rationale	Mechanism	Conflicts
Historic justice	Land should be returned to 'rightful owners.'	Restitution	Choice of date for basis of restitution. Rules of division, exit and provision for workers. Abandoned land.
Economic efficiency		Privatisation, auctions	Division of lots. Inequalities and social tensions. Foreign ownership.
Food security	Land provides means for self-consumption and food security	Distribution	Basis for distribution. Transaction costs. Inefficiency of subsistence farming.

Source: own depiction

Table 4 : Chronology of Land Reform and Farm Restructuring Legislation in Moldova

Year	Date	Legislation
1991	Jan 22	Law on Property
	Dec 25	Land Code
1992	Jan 3	Law on Peasant Farms
	Jan 3	Law on Bankruptcy
	Jan 14	Law on Leasing
	Mar 5	Regulation on Settling of Land Disputes
	Dec 3	Law on Land Taxation
	Dec 22	Law on State Regulation of the Land Ownership Regime, State Land Cadastre, and Land Monitoring
	1994	Nov 8
Dec 2		Law on Normative Price of Land
1995	Jan 11	Regulation on the Content of Documents Related to the General Land Cadastre
	Feb 15	Law on the Amendments to the Land Code
	Jun 6	Resolution No. 377 on Purchase and Sale of Land Plots
	Oct 9	Resolution on Failure to Implement Resolution No. 377 of June 6, 1995
	Nov 6	Resolution on Measures Concerning Purchase and Sale of Land
	1996	Jan 25
Feb 15		Law on Leasing
Mar 26		Law on Bankruptcy (new version)
May 23		Law on Collateral
Oct 2		Constitutional Court Ruling on Law on Amendments to the Land Code
1997	July 4	Government Decision on Measures to implement the Law on Collateral
	July 25	Law on Normative Price of Land and Procedure for Sale and Purchase of Land
	May 29 and Oct 27	Constitutional Court Rulings on Law on Amendments to the Land Code
1998	Jan 25	Law on Surveying and Valuing Real Estate
	Feb 20	Resolution on Purchase and Sale of Land Plots
	Feb 25	Law on Cadastre of Immovable Property
	Mar 14	Launch of the National Land Programme
	April 6	Government Decision on Approving Regulations on Plots of Land and Adjacent Assets as Collateral (Mortgage)
	May 21	Law on Peasant Farms modified
1999	May 13	Law on the Restructuring of Farm Debts

Source: Lerman et al. (1998), ARA (1998), personal communications

Table 5: Average Annual Rural Incomes in Moldova (1999)

Item	In cash	In kind	Total	
	Lei*	Lei	Total (lei)	% of total
Salaries	2,841	190	3,031	17.80
Pensions	343	0	343	2.00
Subsidies, social pensions	17	0	17	0.10
Tax exemptions	571	0	571	3.40
Household Plots	867	4584	5,451	32.20
Non-agricultural activities	277	100	377	2.20
Commercial activities	1,817	0	1,817	10.70
Casual labour	10	0	10	0.10
Earnings in other countries	517	0	517	3.00
Sale of property / assets	633	0	633	3.70
Land rental	0	315	315	1.80
Extended family and friends	467	533	1,000	5.90
Loans	300	33	333	2.00
Other	640	1,977	2,617	15.40
Total incomes	9,300	7,731	17,031	100.00

* In 1999 the average exchange rate was 1 US \$ = 10.91 Moldovan *lei*.

Source: ARA (1999)

Table 6: Number of agricultural enterprises in Republic of Moldova by type

Farm type	Number of Farms					Approx. size (ha) (1998)
	1994	1995	1996	July 1997	Jan 1998	
State and partial state	358	281	236	150	84	400
Collective farms (kolhozes)	535	438	395	260	111	2000
Joint stock companies	36	80	160	261	228	2000
Co-operatives	65	131	194	396	490	670
Individual farms	3,058	13,958	16,064	74,464	98,724	1.5
Associations of farmers	7	67	146	260	264	90
Limited Liability Companies	58	6	11	24	63	N/A
Entities founded by kolhozes and co-ops	44	37	34	22	17	N/A
Total	4,161	14,998	17,240	75,837	99,981	

Sources: Department of Statistics (1998); ARA (1999)

Table 7: Main Indicators of new development in Rural Social Services

	<i>Unit</i>	1990	1991	1992	1993	1994	1995	1996
General education schools	<i>thou places</i>	12.3	6	2.7	1.2	0.6	0.2	0
Pre-schooling institutions	<i>thou places</i>	5	5.1	2.6	0.9	0.7	0.05	0.09
Clubs and Places of Culture	<i>thou places</i>	1.2	5.4	3	1.1	0.9	0	0.7
Hospitals	<i>beds</i>	319	106	235	0	20	0	0

Source: Moldovan Statistical Yearbook (1997)

Figure 1: Map of Moldova

