

# **Institutional Complexity and Resource Access in Transition: the challenges of co-operation for rural livelihood improvement**

**Rachel Sabates-Wheeler**  
**Institute of Development Studies, University of Sussex**



*An extended family cheese-making enterprise in central Kyrgyzstan*

## **Collaborating Institutions:**

Fundația Academică pentru Progres Rural (Terra Nostra), Iasi, Romania  
Center for Economic and Social Research (CASE), Bishkek, Kyrgyzstan  
The Land Tenure Center (LTC), Wisconsin, USA

**Final Report to SSRU of the Department for International Development  
(DfID), Project No. R8172**

# **Institutional Complexity and Resource Access in Transition: the challenges of co-operation for rural livelihood improvement**

## **TABLE OF CONTENTS**

<b>Introduction .....</b>	<b>3</b>
<b>Background and Objectives.....</b>	<b>3</b>
<b>Research Strategy and Methods.....</b>	<b>4</b>
<b>Research Findings .....</b>	<b>7</b>
<b>Organisational form and productivity – quantitative results.....</b>	<b>7</b>
<b>Group typologies.....</b>	<b>7</b>
<b>Cross-cutting themes .....</b>	<b>8</b>
<i>1. LABOUR SPECIALISATION .....</i>	<i>8</i>
<i>2. ASSET POOLING AND ASSET ACCESS.....</i>	<i>10</i>
<i>3. RISK MITIGATION .....</i>	<i>11</i>
<i>4. SUSTAINABILITY: ASSET DEPLETION AND ASSET ACCUMULATION .....</i>	<i>13</i>
<i>5. FAMILIAL BONDS VERSUS SOCIAL LUMPINESS.....</i>	<i>14</i>
<b>Policy Implications .....</b>	<b>16</b>
<b>Research Dissemination .....</b>	<b>18</b>
<b>Bibliography.....</b>	<b>19</b>
<b>Appendices .....</b>	<b>20</b>
Appendix 1: Highlights Summary.....	20
Appendix 2: Seminar Agenda.....	22
Appendix 3: Conference Agenda .....	25

This report follows SSRU’s requirement for a brief account of the applications of the main findings to policy and practice related to the original objectives as laid out in the proposal. Due to the brevity of the report, only indicative references can be made. Please see supporting documentation and forthcoming publications for more detailed accounts of this research. The UK Department for International Development (DFID) supports policies, programmes and projects to promote international development. DFID provided funds for this study as part of that objective but the views and opinions expressed are those of the author and collaborators alone.

### **Acknowledgements:**

I am grateful to the collaborating institutions who assisted in this research (Fundatia Academica pentru Progres Rural (Terra Nostra), Romania; Center for Economic and Social Research (CASE), Kyrgyzstan; The Land Tenure Center (LTC), USA), and to collaborating researchers, particularly Krisztina Dobay, Valentin Bohateret; Roman Mogilevsky; Malcolm Childress and Cristian Kervorchian.

## **Introduction**

Through an exploratory, comparative study of rural Kyrgyzstan and Romania, this study has explored the intricacies of a variety of forms of cooperation in agriculture. The findings highlight the safety net, labour specialisation, asset-pooling and service delivery functions (among others) of different groups that enable rural livelihoods to at times cope and at times improve in situations of imperfect information, sluggish labour and land markets and constrained capital markets. This study provides evidence that small to medium forms of cooperation provide the rural poor with predictable livelihood strategies under conditions of uncertainty. Despite the push for de-collectivisation and privatisation across transition countries there remains a place for encouraging group farming, at least for the medium term, on grounds of both poverty alleviation and agricultural growth.

## **Background and Objectives**

Substantial research in the field of agricultural economics has explored the extent to which economic benefits accrue from collective farming endeavours. Theories around economies of scale in production and labour supervision problems in collective farming have been tested extensively (Binswanger, Deininger and Feder, 1995; Putterman, 1985; Carter, 1985). The accepted conclusion is that there is little robust evidence of the existence of economies of scale in agriculture, due mainly to labour incentive and free-riding problems. This, together with the failed attempt at mass collectivisation across the Soviet bloc, helped to endorse the extensive land reform programmes of the 1990s that focussed on the individualisation of land rights and farming systems. In this context large scale cooperation in the form of collectives was seen as inherently inefficient and little attention was paid to the variety of forms of cooperation emerging at the local level and the nature of their collaboration.

Despite these theoretical and policy conclusions, farming groups continued to persist across Eastern Europe and the FSU suggesting that there are some desirable factors associated cooperative forms. Recently research has begun to provide a more nuanced understanding of agricultural groups and cooperation in transition agriculture (Meurs 1999; Lerman 1998, Sabates-Wheeler 2001; 2002; Deininger 1995). These findings converge to suggest that there are productivity benefits to be found in small voluntary-associated farmer groups and that these groups attest to the advantages of cooperation in an uncertain environment with imperfect market services. While this research has gone some way to providing a more informed view of institutional complexity within the agricultural sector, the majority of it has been conducted using minimal qualitative, in-depth research. Furthermore, most of the research has focused on the economic advantages of cooperation in terms of productivity gains and agricultural growth potential. Little attention has been paid to the non-economic benefits of cooperation under uncertainty and the possible safety net functions and poverty-reducing functions of such groups.

The importance of this study derived from a lack of detailed understanding of the nature of, and constraints to, cooperation for poor people's rural livelihoods. Furthermore, the research intended to narrow the gap between on-the-ground adaptations that the rural poor are experimenting with in response to land reform and existing policy and development practice in post-socialist countries. This proposed study is especially timely for transitional economies, given the rapid pace of major structural economic reform, the declining availability of state provisioning, and the priority assigned by the international development community to institutional flexibility and to local processes that create and sustain livelihoods.

We hypothesised that a plethora of 'middle-ground' institutional arrangements have emerged to help rural poor overcome farming constraints and that these new arrangements have been largely overlooked both in mainstream literature and in policy measures. This oversight is because in a world of well functioning markets (the development goal for these countries) individualised property rights and

enterprise management are efficient organisational forms for promoting dynamic agriculture. In the quest to establish these long-run ideals, a range of livelihood mechanisms with important economic and social functions (in ill-functioning markets) have not been adequately accounted for.

In this context the research objectives were to:

- explain the nature of new agricultural enterprises or co-operative alliances through which the rural poor may be enabled to improve livelihoods in rapidly changing environments;
- identify the circumstances and criteria which contribute to the relative success of new ‘middle-level’ institutions in promoting sustainable livelihoods, thus keeping rural people from moving into poverty.

**Hence:**

- contribute to policies for enhancing the performance of ‘good’ farming institutions or groups, through analysing what processes work best to provide the most effective access for the rural poor and vulnerable;
- suggest a more precise formulation of hypotheses to inform further research.

## Research Strategy and Methods

This study proposed a comparative study of Kyrgyzstan and Romania (specifically the poor agricultural region of Moldavia). These countries are chosen first, because they are characterised by large poor rural societies. Second, while motivated by different principles of resource distribution, the land reforms in both countries have had similar impacts on landholdings. Ten years on, rural communities display surprisingly similar agrarian structures in terms of the level of co-operation of the poor around farming practices. Evidence shows that both have experienced substantial emergence of voluntary co-operation in farming. Clearly, some country-specific differences in the variety of institutions that have also emerged since the land reforms (see forthcoming paper).

The comparison is intended to highlight opportunities and limitations faced by new landowners experimenting with collective action as they adapt to what is in both countries formally a liberal, market-paradigm of agricultural production and land tenure. The cross-regional comparison - that of the Balkan region and a more remote region of Central Asia - enables us to observe the extent to which success in co-operative action is attributable to external factors such as the nature of land reform, access to foreign markets, geographical location or to more endogenous factors related to the nature of co-operation itself. To the extent that farmers are cooperating for similar reasons and in similar forms, this has implications for group theory in general. Policy debates about what types of farms are socially and economically preferable are ongoing in both countries; however, they are characterised by an almost complete absence of empirical data to support differing claims. This study grounds these policy debates.

The strategy to understanding cooperation within groups needed to focus on dynamics between various categories of members within groups, at the same time being sensitive to hierarchy and political structures of each form of cooperation. With this in mind we developed an appropriate research tool and method. The perspective of different categories of actors (e.g., management, members, renters) enabled us to build up institutional biographies of each group. This highlighted areas agency, structure, possible sites of conflict and cooperation and sheds light on Stark’s notion of *recombinant property* (1996).

To address the research objectives we used:

1. *Secondary data sources* to identify various forms and levels of co-operation in agriculture. For example, the MAWR/BASIS/USAID farm survey data in Kyrgyzstan, the ASAL Romanian Agricultural Survey (1996), LTC studies, and a range of Government statistical surveys.

2. *Qualitative fieldwork* that relied on *key informant interviews* with national and local agricultural experts, village elders and the rural poor. These served to greatly enrich information gathered from secondary sources.

The questions of ‘why’ different associations exist and distinguishing characteristics of each was addressed through the following *quantitative* and *qualitative methods*:

- Econometric analysis of the most recent farm household survey to be completed in Kyrgyzstan (for details of this see accompanying paper on asset pooling). This survey provided in-depth data on farm choice and production so that production analysis that compares individual and cooperative farm types could be conducted. Comparative productivity was analysed by using non-parametric techniques and a quadratic production function.<sup>1</sup>
- *Institutional Biographies* were created using a structured qualitative interview and drawing on the following methods:
  - *in-depth individual and focus group discussions* with a range of individuals including members, managers and chiefs of different institutions. These discussions explored the dynamics of the land reform effects on peoples farming decisions and the social relations underlying the structure of each group.
  - *case studies* involving structured interviews with households and institution management were performed that relied on *historical recall data* (since the land reform). This allowed us to trace the evolution of various institutions in terms of such factors as, membership, relational structure between members, mode of operation.

The above data allowed us to build up a picture of the variety of forms of co-operation and their comparative advantages.

#### Research Activities in Kyrgyzstan and Romania

Time period	Researchers involved	Activities
August 2002 – Dec 2002	Rachel Sabates-Wheeler, UK Roman Mogilevsky, KR Christian Kervorchian, RO Malcolm Childress, USA ROs	<ul style="list-style-type: none"> <li>▪ Fieldtrip visit to Romania to interview officials involved with land reform procedures.</li> <li>▪ Identified a collaborator (Terra Nostra) as due to unforeseen circumstances the initial one could not continue.</li> <li>▪ Conducted a literature review on the theory of groups and institutional formation.</li> <li>▪ Fieldwork in the Kyrgyz Republic. Interviews.</li> <li>▪ Completion of a Country Brief on land reform and land institutions for Romania and one regional paper for Moldavia.</li> <li>▪ Drafted two questionnaires for survey instrument.</li> <li>▪ Obtained a new data set on farm structure in Kyrgyzstan.</li> </ul>
Jan 2003- Jun 2003	Rachel Sabates-Wheeler, UK Malcolm Childress, USA RO’s, Roman Mogilevsky, KR Krisztina Dobay, RO Valentin Bohateret, RO	<ul style="list-style-type: none"> <li>▪ Conducted extensive data analysis on Kyrgyz farm structure data set as complementary information to the qualitative research to be performed for this study.</li> <li>▪ Completed the Country Brief for Kyrgyzstan</li> <li>▪ Field work in Romania where we pre-tested, translated and finalised the survey instruments for the project. Interviews.</li> <li>▪ Identified interviewers and selected sites for the survey.</li> </ul>

<sup>1</sup> A quantitative analysis was not conducted for Romania as the author has previously performed similar analysis using data from Romania.

		<ul style="list-style-type: none"> <li>▪ Finalised survey instrument for Romania and trained the interviewers.</li> <li>▪ Accompanied interviewers in the field for training.</li> </ul>
July 2003-Dec 2003	Malcolm Childress, USA ROs, Interviewers Rachel Sabates-Wheeler, UK	<ul style="list-style-type: none"> <li>▪ Field Visits</li> <li>▪ Research Collaborator travelled to Bishkek to work with the interviewers</li> <li>▪ Interviews in Kyrgyzstan (Osh and Chui)</li> <li>▪ Interviews in Iasi, Romania</li> <li>▪ Monitored the quality of interviews and translation</li> <li>▪ Began to analyse qualitative interviews using appropriate software</li> <li>▪ Drafted quantitative paper</li> </ul>
January 2003-April 2004	Rachel Sabates-Wheeler, UK Roman Mogilevsky, KR Malcolm Childress, USA	<ul style="list-style-type: none"> <li>▪ Analysis of interviews; write-up of reports and draft papers; workshop held in Bishkek.</li> </ul>
April 2004-June 2004	Rachel-Sabates-Wheeler, UK Kristina Dobay, RO	<ul style="list-style-type: none"> <li>▪ Dr. Dobay visited IDS for analysis and write-up of reports</li> </ul>

In Kyrgyzstan research sites were identified in the North, in Chui Valley, and in the South, in the Ferghana Valley. This north-south comparison was used as the land holding patterns are very different across these regions and may affect the nature of cooperation. The North-East of Romania, Moldavia, was chosen as the primary research site due to the high incidence of poverty in this region relative to the rest of the country. A southern comparison was gained from previous work by the author. Interviewers were trained in each country to conduct recorded, structured qualitative case studies of a range of groups. A 'group' was defined broadly to refer to people or families working together in order to perform an agricultural activity. Each interviewer was responsible for writing up the case studies corresponding, as far as possible, to five groups as follows:

- 1 group between 2 and 4 members (i.e., brothers working together)
- 1 group between 5 and 10 members
- 2 groups between 11 and 30 members
- 1 group above 30 members

In some villages medium sized groups were difficult to identify and so a range of representative groups were studied. For the two smaller groups interviewers carried out structured interviews separately with one group member and one person from the group management. For the two larger groups, at least two member interviews and one management interview was carried out. This meant that a minimum of 127 interviews were carried out. A shorter interview was also conducted at the village level for each village. Interviews were conducted in late summer and autumn of 2003.

Total sample of case studies

<b>Group size</b>	<b>Romania</b>	<b>Kyrgyzstan</b>
<b>Family and small</b>	8	12
<b>Medium</b>	3	10
<b>Large</b>	8	8
<b>TOTAL</b>	19	30

## Research Findings

Although at the early stages of transition reformers anticipated that the old collective farms would disappear and be substituted by private smaller scale farms, big associations similar to those that existed under communism continued to persist. Furthermore, the work here shows that new co-operative forms of farming have emerged that survive on a very different mode of operation than the larger associations. These new forms, detailed below, provide flexibility and resource access to resource-constrained farmers which allow them to achieve higher levels of productivity, risk management and sustainability than if they pursued an individual farming strategy. This piece of exploratory research reveals what kinds of landholders are likely to choose or become trapped into specific farming strategies. The selected findings presented below focus predominantly on similarities emerging from the research across both countries and the implications these have for cooperation under uncertainty. Country-specific comparisons will be detailed in forthcoming publications.

### Organisational form and productivity – quantitative results

Previous work by the author has shown that at certain resource levels (land, labor and capital) small farmer groups provide efficiency benefits to production, relative to both individual farming strategies and very large farmers associations (Sabates-Wheeler, 2002). The quantitative work performed as part of this project further supports this finding, indicating that small and medium-sized group farming formations in Kyrgyzstan provide efficiency advantages over fully individualized farming. Due to the limitations of this small-scale research we did not attempt to model the causality of these differences. Indeed, the thrust of the overall research project was to interrogate this issue qualitatively. However, the quantitative results merit discussion and clearly have some relevance for the set of policies regulating agricultural restructuring and the broader development and poverty reduction framework of the country (see the accompanying paper for the econometric model specification and a discussion of these results).

Given the amassing evidence pointing to the benefits of cooperation under uncertainty (cited above and in section 1), our qualitative interrogation started from the assumption that group alliances are able to provide a range of livelihood benefits to farmers under conditions of uncertainty and therefore our findings highlight the differences between different types of cooperation rather than including a comparison to other farming strategies, such as rental institutions or individual farming.

### Group typologies

A range of cooperative options exist for landholders in Kyrgyzstan and Romania; being nuanced by the geographical region, country specific laws, and family structures in the different countries. Two broad categories of cooperative alliance can be identified, within which sub-categories exist:

1. *Small and medium, spontaneously evolved groups*: these include a wide range of cooperative alliances, from two brothers and their families working together to groupings of up to 30-40 members. The typical small group ranges from 4 to 15 families. Unlike the formal associations, members in these family societies are typically related through either social or familial ties. In Kyrgyzstan, owing the large extended family and kinship structure, these groups are characterised by members related by blood, whereas in Romania it is not uncommon to see friends and neighbours cooperating in agriculture. The social structure of these groups is also a direct reflection of the way in which land was privatised in each country. Restitution in Romania meant that relatives may not necessary receive land in contiguous plots, thus joining land with neighbours proved beneficial. In Kyrgyzstan, where land was re-distributed, it was usual for relatives to claim pieces of land adjacent to each other. These groups have spontaneously evolved since the privatisation of land and typically members have land in similar locations. In small groups members provide both land and labour and collectively decide on production plans. The management structure is flat in comparison to the large, legally-registered groups. These smaller groupings provide a range of beneficial functions that will be discussed below.

2. *Larger, legally registered groups*: The main type of large groups are associations that were typically formed on the heels of the ex-communist agricultural collectives, and often retain their original production profile. These larger farms are legal entities, their status corresponding to the appropriate laws in each country. They are characterised by a hierarchical management/ member/ renter structure. Some members only provide land and are considered non-active; whereas others provide both land and labour. Typically non-management members receive payment in kind at the end of every harvest. In the early years of transition these types of association were strongly encouraged, in both Romania and Kyrgyzstan, via subsidies and preferential credit due to their perceived economies of scale, their role in maintaining the fixed capital of former collectives and their more frequent consultation with extension agents. Another type of large, legally defined group that involves cooperation is a *commercial company*. These can be run by individual entrepreneurs, but typically they comprise a small group of active members dedicated to management and a large group of non-active renters. These companies are relatively new structures, often managed by a wealthy entrepreneur (and family) and are always market-oriented.

## **Cross-cutting themes**

The group case studies carried out for this study suggest a number of cross-cutting themes for the above farming strategies. Below we discuss five such themes.

### ***1. LABOUR SPECIALISATION***

While land assets in both Romania and Kyrgyzstan were distributed in a relatively equitable fashion, non-divisible physical assets like machinery and buildings were either not distributed at all, distributed to groups of shareholders, or acquired by well-placed individuals. Furthermore, non-physical, but equally crucial assets—technical and entrepreneurial skills, physical ability, networks of trust, contacts and influence, proximity to markets, agroclimatological attributes—were *a priori* distributed in a much more heterogeneous and idiosyncratic manner which, for any specific individual or household give significantly different value and functionality to the land and physical assets received in privatization and restructuring. Endowments of non-physical resources can be expected to vary significantly within families and within outwardly homogeneous communities.

In a theoretical world of perfect factor markets (especially for labour) the varying quantities and qualities of non-physical assets would be priced and allocated on the basis of a large number of transactions and allocated the full spectrum of productive sectors. But such a market solution is thus far extremely limited in Kyrgyzstan and Northern Romania. When the seasonal, episodic, and specialized labour demands of agricultural production are taken into account, grouping appears to provide a way to ensure efficient use of land, equipment and non-physical assets while maximizing the non-farm opportunity set for the groups' members.

Given the constraints in land, capital and labour markets, small and medium sized groups are able to specialize their labour effort better than if they were to work their land individually, both by dividing tasks within the work force and by uniting groups of workers around the relatively highly capable or skilled farmers (which could also be viewed as a self-selection effect). Small 'family' groups are able to pool labour and assign tasks in order to increase returns to agriculture (see box). Furthermore, these groups face low transactions costs in labour monitoring, with fewer people and interests to coordinate. Medium sized groups also benefit from labour specialisation. For instance, a 10-family, bee-keeping and crop production group in Romania describes the way in which agricultural activities are performed: "the group performs the agricultural activities together, but only two of its members are specialized in beekeeping. The rest of the members perform different activities such as: transportation and guarding of the beehives on the field, purchasing of beehives or beehive repairing. Among the field work and the activities done individually or in the household there are: ploughing, threshing, processing, marketing. The other activities are done together within the group (weeding, hoeing, planting, fertilizing,

harvesting). The first activities are done individually because the association does not have the necessary means for these activities and it has to hire them.”

As group size increases we see that the most physically labour-intensive tasks, such as weeding, and tasks that may pose moral hazard problems, such as marketing and application of fertilisers, become the responsibility of each member. Whereas mechanisation—ploughing, threshing, harvesting – remains a group responsibility. This change in the nature of labour assignment reflects the increasing costs of labour monitoring and group size increases.

#### **Box 1: Task-assignment and service-exchange in informal groups**

The Ciornea Group in the village of Aroneanu, Romania (situated about 5 kilometers from Iasi city), currently comprises four members and is led by Mr. Ciornea. Formed in 1991, the group has undergone many changes in its activities, ranging from trading in transport, to agricultural product trading, to swine breeding. At present the group is focused mainly on agriculture production (field crops) and agricultural product trading, with some animal breeding and service delivery. In 1995 Mr Ciornea, previously a driver for the agricultural collective, established the informal group and switched into farming and agriculture. Helped also by a favourable opportunity, the government’s ordinance by which the Government paid 55% of agricultural expenses and the farmer 45%, the group purchased a range of agricultural machinery: a tractor, a plough, a disk, a hoeing machine and a seed drill. The changing group activities over time appear to reflect the groups orientation to market signals. Speaking of how are they going to work next year to obtain a better production, one of the sons said: “Generally we focus on what sells goes well next year, but one has to have intuition. We guide ourselves according to what sells well in the year in course.”

Since 1998, the Ciornea group has been renting land in Aroneanu village, having at the moment (in July 2003) an area of around 36 hectares. From this only 1 hectare belongs to the members, the rest is rented. Initially, Ciornea group was made up of only one member: the group leader. Currently, the group is made up of 4 members (father – group leader, mother and two sons).

In the Ciornea group, every member has different training. One of the sons is a mechanical engineer, the other son has a training certificate in farming issued by the Agricultural Directorate of Iasi and the father (the leader) is self-employed. All activities are performed within the group, except for weeding when day labourers are hired or renters weed their own land, and for marketing which is the business of the group leader. Depending on how good the year is, group members share assignments. Tasks within the group are typically differentiated as follows:

- leader (decisions of the manner of administration of the land, tilling, sowing, herbicide, weeding, procurement of seed and herbicide, maintenance of relations with renters)
- mother (accounting)
- first son (machine-tools repairs, tilling, sowing, weeding, harvesting)
- second son (tilling, sowing, weeding, harvesting)

Starting with 2002, there is also a slight form of collaboration between the Ciornea group and a family friend, Eugen Avadanei. Of the family friend the group leader relates: “we calculate everything like brothers, to be all right. He [the friend] has the sunflower which sowed and I weeded. He harvests it, collects his money and then we calculate: which are my works, which are his.” Interestingly, hostility to new members comes from concerns about labour duplication. For instance, the leader’s opinion on the co-option of new members is: “On the one hand it’s good”, he states mentioning the example of Eugen Avadanei and insisting on the advantages of mutual help, “on the other hand it’s bad”, justifying his answer, “When two do the same job, it is never well. Everything comes from profit. One thinks he worked more, spent more and hence problems.”

Service exchange: (none of the groups have the full range of services, thus there are lots of informal exchange relations). Ciornea group has stable relations with two other traders within the village (Eng. Calugaru and Petrica Hodorogeanu (main service providers in the communa)) and with a supplier (Mr T.). The leader sees such relations/links as a tight collaboration. In the case of the former two, there is an exchange of service supply (activity of merchandise transportation in exchange for processing certain agricultural products). In the case of the supplier, the collaboration is seen like long-term crediting: Ciornea group buys seeds or insecticide and pays the due sum at the first harvest.

While Mr Ciornea does not attribute membership status to renters, the renter we interviewed indicated that in fact he sees himself as a group member, justifying this perception through labour exchange: “I can say that I belong. Because I help them in fact; when the tractor doesn’t work I go and repair it. And they help me when I have problems. In the end, at harvest time, they see me as any other renter. Yet we help each other.”

Reflecting on the themes of both asset pooling and labour specialisation, a general pattern can be observed across the farm types and sizes. **Very small groups approximate individual family farms with the main function being cooperation around production, whereas the larger groups exist to support individual farmers. That is cooperation around the agricultural production process is not the main rationale for grouping. Rather, the primary function is efficient service delivery and service access to support individual farms.** As group size increases, the group supports individual farming/livelihood rather than vice-versa

## ***2. ASSET POOLING AND ASSET ACCESS***

The empirical results clearly show that access to land, labor and capital (physical and financial) are important determinants of how a farmer will choose to cultivate his land (see accompanying paper on asset pooling). Participants of larger groups tend to be the most asset constrained, while individual farmers are the least asset constrained. This finding is further borne out by the qualitative case studies where the main reasons given for cooperation across all farm categories are: land consolidation; machinery pooling; labor sharing and joint financing. The Box below uses quotations from farmers to illustrate these important asset pooling functions.

### ***Emerging Machinery Rental Markets, Service Delivery and Family Farms***

Assuring access to lumpy machinery - tractors and combines especially - and the field level economies of scale that using machinery in a group can provide is a frequently cited asset-pooling function of many groups. In all but one of the Kyrgyz case studies, and in a large majority of the Romanian case studies machinery, either through ownership or renting, is an important group function. Machinery services are either provided using the group's equipment or are hired by the group for the land of all the members, even if other field work is done separately by each family. The majority of village level interviews listed machinery services, deterioration and/or spare parts as being among the main problems facing the village.

Several interviewees mention the lower unit cost of machinery works on a larger area as being one reason for the group structure to exist. Arranging agricultural machinery is one of the central duties of farm managers in each case. Many of the interviewees, however, complain about being taken advantage of by machinery operators, especially for land preparation or by incomplete harvesting, which suggests a lack of competition and under supply. For instance, the manager of a group of 27 households in Kyrgyzstan states that '[As a group] we hire tractors, and combine harvesters. Owners of tractors offer incorrect prices. But when the time comes, during the season, farmers have no choice and have to agree with the owners of the tractors.' On the other hand, the narratives from Kyrgyzstan confirm that traveling combine-harvesters appear to cover the entire country in season. Arranging timely service from these providers, however, is cited as difficult. In Romania, farmers feel similarly disadvantaged as service delivery at high seasons is not always timely.

## **Box 2: Quotations illustrating the typically cited benefits of asset pooling**

### *Romania*

Small group leader: Referring to a family friend that has started to collaborate with his group, the group leader of the Ciornea group says: “He was a policeman, is now retired and is willing to work like me. He told me: ‘How long am I to stay and do nothing, what do you say, aren’t we going together?’ And I told him: ‘OK, let’s do it!’ ” We are helping each other: he has a wheat seed drill I have a maize seed drill, I have a disk, he hasn’t any, he has a combining machine, I haven’t got any. So I started working with him last autumn and we are working together now.”

Renter: Asked about the disadvantages of the group work as to individual work in farming, the renter says: “when in group, farming works are done on larger lands and such farming is much more profitable and much more efficient.”

Large group leader: work in group has advantages, especially for the people who do not have equipment to work the land. Among the advantages the group leader mentions:

- “- the work is performed mechanically on large land surfaces;
- agricultural works are performed at the same time for all members of the group, saving time and money in this way;
- the sale of products is done by making use of mechanical transportation for all the members of the group, saving time and money and obtaining a better price.”

### *Kyrgyzstan*

Large group member: “It’s better to work in the group than separately because we have neither machinery nor knowledge for separate land cultivation. When we work in the group, we’re managed by experienced and expert man.”

Small group member: “I will use work in group because in the future one family won’t be enough for profitable farm formation. One family won’t be able to buy tractors and harvesters. Even if family is able to do it, expenses for repairing will be too hard for one family.”

Group Leader: “Collective cultivating of the main land plot gives real advantages. Land cultivating becomes cheaper, many agricultural and technical questions are solved easier. Group labor also facilitate execution of many kinds of agricultural works.”

**Stories of machinery access describe a problem of limited access to ageing equipment and the immediate solutions encountered, including group formation, while also showing the emergence of a crucial but constrained market for machinery services.** Of the machinery situation, a nine family (63 person) group in Osh, Kyrgyzstan said that “the main problem is lack of machinery. We work with old machinery, which existed during Soviet times. Agricultural service are absent. There are only two combines in the area. They are not able to implement harvesting completely. As a result the harvest becomes overripe and the peasants suffer losses.” Public policy for machinery access has focused on permitting market forces to operate in the sector and specialized machinery operators have emerged, largely on the basis of Soviet-era equipment. Machinery dealerships, parts and maintenance, however, remain weakly developed in both Romania and Kyrgyzstan which further limits competition. Enterprises with good machinery endowments are high demand for service provision to those without, but the equity of these arrangements is sometimes questioned. The weak machinery distribution supply chain appears to be a function of profitability levels in agriculture, long-term financing constraints in the banking system, and the prevailing set of institutional risks and incentives.

### **3. RISK MITIGATION**

An important factor creating an incentive to work in small ‘familial’ and medium-sized groups is uncertainty and risk. There is no agricultural insurance market in Kyrgyzstan and in Romania agricultural

insurance is limited in the sense that it does not cover major risks regarding drought and natural disasters and it is too expensive. This, coupled with thin state-sponsored social protection, means that individuals in agriculture face the full risk and uncertainty of climactic events, market fluctuations and institutional/legal changes. Land markets are still in their infancy (although practically non-existent in Kyrgyzstan). Pooling of resources and mutual assistance can lower the risk for a particular individual or household from livelihood crises. That is, **by grouping in small or large cooperatives farmers are able to mitigate production risks better. In this way the group is seen as an insurance mechanism for maintaining a certain level of agricultural livelihood. This theme emerged most clearly from the very small familial groups, but nonetheless it also provided a rationale for group membership in larger groups especially amongst the category of renters.**

**Small groups have particular characteristics which insure against risk: they have the ability to be 'flexible' when providing support, directing attention towards whomever needs it the most.** That is, the "advantages of mutual help...[and] joint produce sales is...group members' mutual support when one of them [needs] it". The social characteristics of small groups allow them the ability to withstand shocks (e.g. bad harvest years) without causing the group to break up. One particular example of this can be seen in a small group in Sipote, Romania, where the familial unit was described as providing essential shock-absorption. When asked what the conditions were for new members to join the group, the manager replied that because "...in agriculture 'we work in darkness' and agriculture implies risk that not everyone is willing to accept...[since] we cannot insure the harvest, only family members were currently in the group." By implication that is, the bonds holding together unit or familial group were seen as strong enough to withstand a failed harvest and prevent members from withdrawing altogether. Thus by acting as a shock-absorber, informal bonds keep the group together. Were members to join from outside of the family unit, they "should [bring with them] money, which can substitute for the lack of familial bonds, as insurance against failed harvests."

Importantly, in an environment where formal/written agreements do not always carry with them the obligation to uphold the contract, or in cases where it is not always forthcoming to legally back such agreements, *informal/verbal* agreements take on particular significance: "[its not just having formal agreements or family relations in the groups that's important] what's important is that there must be understanding and keeping of the word given at the beginning." Since such informal agreements are more successful in small groups, they tend to be more stable. Small groups also provide safety net functions for relatives: 'the company supplies agricultural products in small quantities for relatives and friends who need them. This refers only to first degree relative' and 'they [the relatives] come to help with the work. For instance, there is a cousin to whom some products were sent from time to time and he came when he was needed.'

While small, informal and family based groups tend to have relatively flat structures in terms of status, decision-making and power, and therefore members tend to share the same motivations for cooperation, larger groups, such as agricultural societies and commercial companies display a much more diverse profile in terms of hierarchy, decision-making and reasons for cooperation. Interviews with managers and management of these farms typically suggest that the main motivating factor for cooperation is long-term profit and increases in production, whereas interviews with renters and non-active members tells a story of dependency and subsistence livelihoods.

A renter from Romania tells that he gave his land for rent since he was no longer able to service it himself: "I didn't have working conditions, so, obviously, I had to give it to be serviced by a company". The renter said that the main reason for giving the land under rent is that she is old and sick and cannot process the whole land she possesses. In Kyrgyzstan, a manager of a seven-family group rents land from seven other farmers. Asked why the farmers lease their land, he replies "because they have no other possibilities to work it. It is very expensive for them." Similarly, the demographic profile of a large juridical cooperative showed that the majority of its 40 renters are pensioners.

**In summary, we see that cooperation provides important risk management functions under conditions of uncertainty. These benefits are not offered through individual farming as a strategy.**

**Very small familial and neighbourly groups cooperate for reasons of subsistence assurance, labour specialisation, task exchange, land consolidation and risk mitigation. Most large cooperatives provide important safety net functions for pensioners and absent land owners**

#### ***4. SUSTAINABILITY: ASSET DEPLETION AND ASSET ACCUMULATION***

The qualitative institutional biographies investigated sustainability through discussions around years of establishment, (re)investment, debt, potential destabilising factors to group activities and short-term financing. While the majority of groups proved sustainable in the short-run along at least one of these dimensions (possibly due to selection bias in the interview method), interestingly we found clear differences between the nature of sustainability of small ‘family/social’ groups and larger cooperatives.

Concerning financing in times of crisis, many small groups rely on money that comes from wages, pensions, distress sales (animals), members’ savings and very occasionally informal loans from friends and family. These groups do not, and are often not able to, take large loans from formal lending institutions. At times this is because the members are adverse to interest rate risk, but also because the banks will not lend to small farmers. **What is clear from many of the case studies is that crises lead to asset depletion for small groups.** Members would rather sell or draw down an asset than go into debt. The manager of a small informal group in Iasi stated “that, should he sell a pig or a calf, he gets the money for tilling, seed, sowing. The money for current expenditure during the agricultural season also comes from pensions because ‘nobody ever helped us with anything.’ Of pensions, an older member of a small subsistence group declared: “we are lucky” because they have their pension as a safe revenue source.

What is of real interest is that the process of asset depletion does not typically cause instability or breakdown within the group; rather the transparency facilitated through the flat structure of the group means that **asset depletion is seen by most members as a form of mutual support and as a coping mechanism in times of hardship.** This finding cannot be understood without an appreciation of the social structure of the group as compared to larger groups (see following section).

While stability of membership in times of trouble sustains the group over time, re-investment and long term investment plans of these groups are severely limited. Investment of these groups goes towards re-current costs such as machinery repair or machinery rental. **Given that many of these groups can be characterised as ‘subsistence’ groups, this means that the members tend to find themselves trapped into static farming techniques with little ability to increase production** (the econometric results in the accompanying paper confirm this finding).

In larger groups, especially those which are heavily oriented towards the market, financing in times of crisis comes from product sale, personal savings of management, or informal loans from people in the village and sometimes formal lending sources. Rarely did interviewees mention asset depletion as a source for financing. Storage facilities, something few small groups have, provide a useful buffer bank in times of crisis. This was further confirmed through an exploration into factors that may destabilise the groups’ viability. The majority of small groups mentioned ‘mother nature’ (e.g., drought, hail) as the main concern, while larger groups pointed to membership instability and management problems as the main concern. Larger groups rarely pointed to mother-nature as a potential problem, which may be explained by the fact that these groups have storage facilities and a wider crop portfolio than the small groups.

Small groups face much higher co-variate risk due to small land holdings and limited crop portfolio (typically food crops). This means that their ability to recover from an external shock is limited. Risk for them is not related to the group, but to the external environment. For larger groups, risk for members is related to possible management/member problems. **Larger, non-familial groups are more unstable in**

**terms of membership (there were substantial cases of changing membership in larger groups) but more stable in terms of buffer stocks, crop diversity and up and downstream linkages.**

Reinvestment in large groups is discussed in terms of: new buildings ‘they reinvested in the building of a 100 meters of fence around the association headquarters, the renovation and maintenance of certain buildings’; up-grading quality such as ‘the profit is usually re-invested in genetically-valuable breeding livestock’; investment in new machinery, and investment in experimentation: ‘we want to build some greenhouses or solariums to grow vegetables (until now, they have only grown vegetables in the fields). I [the leader] intend to make such an investment on my own, at first, and then I hope to convince my brothers. This year, I conducted an experiment at home, with 2 solariums where I used a dripping irrigation equipment and reached the conclusion that it would be more advantageous to grow vegetables in a greenhouse.’ Groups that claim to be growing in terms of profit and production are characterised as having a diversified crop profile, comprising profitable crops such as tomatoes, vegetables and fruit. Also, often there is mention of downstream and upstream linkages to input supply, processing and marketing.

In summary, sustainable small groups prove stable in terms of membership but have few long term investment and growth avenues. Larger groups tend to invest more, have stable growth plans, but membership fluctuates substantially.

## **5. FAMILIAL BONDS VERSUS SOCIAL LUMPINESS**

The majority of groups interviewed for this study, whether profit oriented or mainly subsistence based, were characterised as familial/neighbourly groups. All family groups in Romania comprised less than 32 members (or families), while non-familial groups were larger, up to 500 members. On average the Kyrgyz familial groups were larger in terms of membership, up to 50 members, but smaller in terms of the number of families, (7 or less families). The main reason for this is because family sizes are on average much larger in Kyrgyzstan than Romania, with multiple sub-family units comprising a large family.

**Table 1: Relationship of group members to each other**

<b>Internal dynamics<sup>2</sup></b>	<b>Romania</b>	<b>Kyrgyzstan</b>	<b>Total</b>
familial/neighbourly	11	19	30
	57.9%	63.3%	61.2%
professional/non-familial	8	11	16
	42.1%	36.7%	32.7%
Total	19	30	49

Managers in both countries took time to point out that their group was familial, and seemed to take pride in this. Mr Sabyrbek, manager of Teniz group in Baitik, Kyrgyzstan, stressed that “of course there are blood ties among group members”, while Mr. Medet, manager of Joldosh farm, also in Baitik,

<sup>2</sup> Each group was classified as ‘familial/neighbourly’ or ‘professional/non-familial’ based on group meeting structure (whether these were informal, in a members house, during family meals versus more formal, pre-scheduled meetings, with a required attendance sheet etc) and also on the decision structure (decisions taken by eldest/head of household versus by elected manager etc).

Kyrgyzstan, stressed that he “does not take on anyone and works only with his family”. Mr. Neculai, manager of a four member informal group in the village of Aroneanu stated that “at present, anyone who would want to join the group would have to be "like them". We don't think anybody else would fit in as well as us". Similarly, Mr. Acatrinei from the same region and a member of an informal group said that “we have accepted no new members since group formation, because the three of us get along well together.” He explained that in order to maintain the group homogeneity, they prefer not to take in new members. Thus, being ‘familial’ was not understood as being ‘unprofessional’, rather it was seen as a distinct form of organisation, which in certain circumstances was rated as a *better* foundation for an agricultural group. Some small groups in Romania considered increasing their size itself as a means of risk or “a disadvantage because things would get complicated.”<sup>3</sup>

While the case studies showed small groups to be both trust enhancing and thus a perceived safety-net for members, on the flip side of this an interesting finding emerged from the Romania data suggesting that groups are also constraining, in the sense that members were not necessarily free to leave due to possible recriminations from relatives and other family members. A Romania villager who rents her land to her nephews stated that she trusts her nephews (being her relatives) more and believes that if she decided to give her land under rent to somebody else, her nephews would be mad and she does not want this. Another family group member stated that, “we all belong to the group because it’s the land of the family and the land itself gets us together. The land belonged to the grandparents and was inherited by our parents. Each of us had the right to have land and service it only if we stayed together.” Of possible withdrawal from the group a manager says that “If someone wants to get out, (s)he can do it. But only after the end of the agricultural year and after having sold the harvested products. But this is not the case for us. We are family and the land is on our father’s name.” A Kyrgyz proverb told to us by one interviewee is particularly telling “who separates, he will be eaten by wolves.” Other Kyrgyz respondent likened the disintegration of the group to a family divorce. In other words, **there is a social lumpiness that comes with grouping around family and friends that can be both constraint alleviating and choice constraining.** This finding corresponds to Portes’ notion of the downward levelling pressures of social capital and also supports the static nature of these small farm groups, discussed above.

As can be expected, the groups shift from being familial/social to being non-family with increase in size in both membership and asset ownership, particularly land. In this regard, both Romania and Kyrgyzstan show similar characteristics. Entry as active members into legal groups such as agricultural associations can require a cash input, a labour specialisation and often a land input also. Clearly this implies that many rural farmers, especially those who are labour constrained, cannot enter the association as a member with the decision-making power that accompanies this position. For these farmers rental is an option: “In order to be rented the land must be grouped, meaning it must be a single field, not in scattered plots. All those neighbouring the rented plot may “join” it at any time, if they cannot afford to service their land themselves. While exit is generally straightforward, requiring notification from the landowner in advance of the planting season and withdrawal cannot be made until the end of the agricultural year without penalties, it is constrained by lack of alternatives, especially for poorer, asset constrained land owners.

---

<sup>3</sup> The manager was specifically referring to coordination costs.

## Policy Implications

As transition agriculture continues to adapt to land reform choices that were made ten years ago, a major policy question facing the Kyrgyz and Romanian governments must be what kind of agrarian structure should be facilitated in order to promote agricultural growth on the one hand and provide farmers with social protection against potential subsistence crisis on the other. This study has investigated the intricacies of a variety of forms of cooperation in agriculture and has illuminated the challenges to cooperation for the rural poor. By presenting institutional biographies of different options open to farmers, this research emphasizes the importance of understanding new tenure forms in the context of the socialist past and current transition period. The policy relevance of this research is clear as the NE of Romania and Kyrgyzstan have large rural populations characterised by high levels of poverty. The most pertinent findings and policy implications are discussed below.

Small familial and neighbourly groups provide important functions under the high levels of uncertainty that characterise transition agriculture in Northern Romania and Kyrgyzstan. Subsistence assurance and risk mitigation being the most valuable functions. Due to the social relations constituting the group. The flat structure and high levels of trust and mutual support, the groups are stable in membership over time. However, due to motivations of subsistence assurance, asset depletion, lack of assets and financial resources and lack of longer term investment, these groups remain static and locked into subsistence farming strategies. **A clear policy implication emerging from this is to help small family farms move out of subsistence cycles where asset depletion occurs whenever external shocks hit, to a place where they have insurance against asset-depletion.** This type of move could be facilitated by a combination of any of the following: agricultural extension and a move into diversified cash crops rather than food crops; provision of small scale agricultural credits; provision of storage facilities in the village for small groups; and facilitation of upstream and downstream linkages. **Furthermore, there is a need to encourage small groups to move into alliances with members outside family and relatives, either as group members or as service providers.**

**Measures must be sought that alleviate penalties against small forms of cooperation. At the macro-policy level there is a need to examine legislation and regulation so that small and medium groups are not discriminated against.** For example, Kyrgyz Government policy on VAT for agricultural producers is the most specific policy issue which impacts family farms and small groups. Currently the policy is set such that farms with gross sales of less than 300,000 soms are exempt from VAT. This exempts most single household farms, but puts many multi-household and small groups into the VAT category. If the VAT system was functioning perfectly the VAT paid by these farms would be passed on to buyers and so on to final consumers. But in a situation in which many producers do not pay VAT, it makes it very hard for medium sized producers to pay and pass on the tax. Several family and small group farms mentioned the introduction of the VAT for agricultural producers as a factor which may cause them to dissolve the group. Given the important functions of groups under transition perhaps the policy on VAT should be re-evaluated in light of the findings in this research.

The econometric results in the accompanying paper suggest that individual farms are advantageous only when the farmer has an adequate asset portfolio (land, labour and capital). Grouping for agricultural production indirectly suggests that individuals with fewer non-physical assets are staying in agriculture, linking themselves with relatives and neighbours to assure their subsistence, or to reach higher levels of agricultural income, rather than seeking off-farm labour opportunities. This has different implications for agricultural policy in Kyrgyzstan and Romania. The Kyrgyz agricultural sector is relatively labour abundant. The results point to the weakness of the Kyrgyz non-farm labour market and the need to focus public and private investments in non-farm employment generating activities. Throughout the post-independence period Kyrgyzstan has struggled to find non-agricultural employment. **Greater articulation of downstream processing and marketing activities to raw material production appears to suggest a way forward. Encouraging off-farm employment would release land in the**

**rural sector and thus promote a dynamic land market.** Under this scenario land is more likely to move into the hands of those most able to farm it and commercial farming is more likely to take off.

In Romania the story is quite different due to the dearth of labour in the rural sector and the aged population of the farming sector. A precursor to a dynamic land market in Romania requires that people are interested in pursuing a livelihood in agriculture. Measures must therefore be taken to promote the entry of younger farmers into the sector. In the longer-run this could solve the problem of the mismatch between access to land and access to labor at the rural household level and would promote an active leasing market. A variety of measures could be undertaken to facilitate the transfer of land from older people and non-rural residents to younger rural households. **First, the Government could introduce a support scheme (voucher) for young households that are willing to buy land. Second, differential tax rates could be introduced for land under cultivation (or specific kinds of cultivation) and land that is left idle.** Concerning a land rental market, a dynamic rental market is likely to be an attractive option to the multitudes of city-dwelling landholders that may be more interested in returns if there are competitive farmers in the countryside willing to rent land for cash. Similarly a rental market would be more appealing to older labour-constrained landowners living in the village whose only alternative is large association participation. **Certainly some provisions need to be made so that potential renters are able to make standard contracts with the multitude of landowners with which they must deal in order to obtain one contiguous plot of land.**

**In both countries measures are needed to stimulate working land markets and farmland consolidation.** Realization of the sector's potential will depend upon the speed of the process of land consolidation, which can be achieved primarily through land transactions and land leasing. **Ways of encouraging dynamic land rental market should also be sought.** Findings from the study suggest that factor markets for land, equipment and technical agricultural advice remain underdeveloped. Making more machinery available through longer-term loan schemes, public-private partnerships with local government and integration with foreign suppliers of parts and equipment would take pressure off the machinery scarcity and promote a growing private sector involvement in supply chains for parts and maintenance.

Are these various groupings a short-term or medium term phenomenon? In other words, are these groups still a transitional phenomena on the way to "individual" family farms, or are they something that is a sustainable new institution? These are difficult questions to answer due to the many constraints to land and labour movement currently characterising the rural sector. Certainly though, this research implies **that future policy and empirical analysis should be sensitive to the nuances of each type of farming option.** If this is successfully achieved, policy recommendations are more likely to yield fruitful results. What we do see is that larger, economically more successful groups are closer to service cooperatives, whereas smaller groups are predominantly concerned with enabling many rural poor secure their livelihoods. **These results argue for a mild encouragement of grouping as a transitional form of agricultural organization. Flexible mechanisms for farm structures, joint credits, and tax incentives could all be positive measures in this context which would be beneficial to agricultural efficiency and the non-farm labour market.**

Land reform raises many issues: property rights are still uncertain; infrastructure is underdeveloped; farmers and highly capital-constrained; interest rates are high and in general the economy is weak. New small-holders cannot tackle all these problems alone without being threatened with massive bankruptcy or/and severe impoverishment. Solving the problems requires a firm commitment from the Government and the international community to support the agricultural sector. **Individual and co-operative farming should complement each other and be encouraged to coexist while resource constraints and weak markets continue to plague small-scale private landowners.**

## **Research Dissemination**

### **Presentations and workshops**

A half-day conference on “*Small scale cooperative arrangements in Kyrgyz agriculture*” was held in Bishkek, Kyrgyzstan on Thursday, March 18<sup>th</sup>, 2004 in the conference room of UN House. The conference was very well attended by 24 representatives from donor organisations, the government and NGOs. There were three presentations made in English and Russian, after which there was space for discussion. The power point slides for these presentations accompany this report. The work presented provoked much discussion and suggestions and the author is invited to present a paper at an upcoming conference to be held in Kyrgyzstan in October, 2004 (again, a workshop agenda is provided in the appendices).

In May 2004 Krisztina Dobay, the main research collaborator representing the institutional partner from Romania, visited IDS for four days to work with Rachel Sabates-Wheeler on data interpretation, analysis and plans for finalising various reports. Dr. Dobay has since submitted an article to the Annual Report of her Institute (Terra Nostra) that outlines this research and presents some preliminary findings.

### **Further dissemination strategy**

#### **Working Papers and Journal Articles**

Sabates-Wheeler, R. and M. Childress: ‘Asset-Pooling and Efficiency in Uncertain Times: a Quantitative Analysis.’

Sabates-Wheeler and Others: ‘Comparative Perspectives on Small-Scale Cooperatives in Kyrgyzstan and Romania.’

Childress, M. and R. Sabates-Wheeler: ‘Getting By or Getting Ahead? Family Farms, Small Groups and New Markets in Kyrgyz Agriculture.’

All manuscripts are currently being written. Papers based on this research will continue to be published and presented at conferences.

#### **Written outputs**

Policy Briefings will be prepared in Romanian and distributed Romania by Terra Nostra.

Further outputs will be targeted at policy audiences by placing a highlights summary on the ID21 website. ID21 will also email a synopsis of the study to over 1000 individuals and organisations internationally. An overview of the study and relevant publications will be accessible on the Poverty Team site at the IDS website.

### **Other unpublished papers that have been written as part of this study**

Bohateret, Valentin. M. and Krisztina Melinda Dobay, 2003: An overview of agriculture in Moldova

Kervorchian, Cristian, 2002: Country Report on Romanian Agriculture

Kryova, Elena. 2003. Theories of groups and cooperative action: a selected literature review

Childress, Malcolm. D. and Rachel Sabates-Wheeler, 2003, Organizational and Productive Characteristics of Farms in the Kyrgyz Republic During Agricultural Restructuring

## Bibliography

- Binswanger, H., K. Deininger and G. Feder. "Power, Distortions, Revolt and Reform in Agricultural Land Relations." In *Handbook of Development Economics*, edited by J. Berhman and T.N Srinivasan. Vol III, Elsevier Science, B.V. 1995.
- Carter, M. "Revisionist Lessons from the Peruvian Experience with Cooperative Agricultural Production," *Advances in the Economics of Labour Managed and Participatory Firms*, 1(1985): 179-194.
- Deininger, K. (1995). "Collective Agricultural Production: A Solution For Transition Economies?," *World Development*, Vol. 23, N. 8: 1317-1334.
- Lerman, Z., C. Csaki and V. Moroz. *Land Reform and Farm Restructuring in Moldova: Progress and Prospects*, World Bank Discussion Paper # 398 (1998): Washington D.C.: World Bank
- Lerman, Z., K. Brooks and C. Csaki.. "Land Reform and Farm Restructuring in the Ukraine," World Bank Discussion Paper 270 (1994), Washington D.C.: World Bank.
- Meurs, Mieke. "Markets, History and the Development of Private Farming in East Central Europe: a comparative analysis of Bulgaria and Hungary." Washington D.C.: Department of Economics, American University, 1996.
- Meurs, Mieke. (ed) *Many Shades of Red*, Cumnor Hill, Oxford: Rowman and Littlefield Publishers, Inc., 1999
- Mogilevski, R. I. and Malcolm Childress. "Descriptive Results from a Random Survey of Agricultural Enterprises in the Kyrgyz Republic." unpublished report for the Land and Agrarian Reform Project, July 2000.
- Portes, A. and P. Landolt (1996): "The Downside of Social Capital", in *The American Prospect*, June 1996.
- Putterman, L. (1985). "Extrinsic versus Intrinsic Problems of Agricultural Cooperation: Anti-incentivism in Tanzania and China," *Journal of Development Studies*, 21:175-204.
- Sabates-Wheeler, R. "Farm Strategy, Self-Selection and Productivity: can small farming groups offer production benefits to farmers in contemporary post-socialist Romania?," *World Development*, Oct Vol. 30, No. 10, 2002.
- Sabates-Wheeler, R. "Consolidation Initiatives after Land Reform: responses to multiple dimensions of land fragmentation in Eastern European agriculture," *Journal of International Development*, vol 14/7, 2002.
- Wheeler, (July 2001): "Organisational Farm Choice in Contemporary Romania", Problems of Post Communism, George Washington University.
- Stark, D. "Recombinant Property in East European Capitalism". *American Journal of Sociology* 101 (1996): 993-1027.
- Verdery, K. *What Was Socialism and What Comes Next?* Princeton, New Jersey: Princeton University Press, 1996.

# Appendices

## Appendix 1: Highlights Summary

### **Asset-pooling, labour specialisation and risk mitigation: challenges for cooperation under uncertainty**

**Substantial theoretical and policy debate in the 1990s led to an excessive focus on de-collectivisation and individualisation of land rights through privatisation across the former communist bloc. As a result little attention was paid to the variety of forms of cooperation emerging at the local level and the nature of their collaboration. Comparative research conducted in Romania and Kyrgyzstan provides evidence that small to medium forms of cooperation provide the rural poor with predictable livelihood strategies under conditions of uncertainty. Despite the push for de-collectivisation there remains a place for encouraging group farming, on grounds of both poverty alleviation and agricultural growth.**

Policy debates about what types of farms are socially and economically preferable are ongoing in both Kyrgyzstan and Romania; however, they are characterised by an almost complete absence of empirical data to support differing claims. This study grounds these policy debates. Institutional biographies and case studies enabled an exploratory, comparative study of rural populations that explored the intricacies of a variety of forms of cooperation in agriculture. The cross-regional comparison provides insights into the extent that success in co-operative action is attributable to external factors such as the nature of land reform and geographical location or to more endogenous factors related to the nature of co-operation itself.

The research revealed similar findings across countries:

- Very small familial and neighbourly groups cooperate for reasons of subsistence assurance, labour specialisation, task exchange, land consolidation and risk mitigation.
- Due to the social relations constituting small groups and the flat structure and high levels of trust and mutual support, the groups are stable in membership over time;
- however, owing to motivations of subsistence assurance, asset depletion, lack of assets and financial resources and lack of longer term investment, these groups remain static and locked into subsistence farming strategies.
- As groups increase in membership size the nature of cooperation changes. Specifically, the part of production requiring labour supervision is individualized to the nuclear family. Smaller groups approximate production cooperatives, whereas larger groups tend towards service cooperatives.
- Most large cooperatives provide important safety net functions for pensioners and absent land owners

If the governments of many post-socialist countries are to encourage agricultural growth and at the same time ensure stable rural livelihoods for the great majority of their populations there is a need to:

- Make future policy and empirical analysis sensitive to the nuances of each type of farming option.
- Encourage grouping as a transitional form of agricultural organization.
- Stimulate working land markets (including rental markets) and farmland consolidation.
- Make more machinery available through longer-term loan schemes, public-private partnerships with local government and integration with foreign suppliers of parts and equipment.
- Facilitate downstream processing and marketing activities to raw material production.

- Help small family farms move out of subsistence cycles where asset depletion occurs whenever external shocks hit, to a place where they have insurance against asset-depletion.
- Eliminate penalties against small forms of cooperation. At the macro-policy level there is a need to examine legislation and regulation so that small and medium groups are not discriminated against.

### **Contributors**

Rachel Sabates-Wheeler, IDS, Sussex

Malcolm Childress, Land Tenure Center, University of Wisconsin-Madison, USA

Krisztina Dobay, "Terra Nostra" (Fundatia Academică pentru Progres Rural) Iași, Romania

Valentin Mihai Bohateret, Terra Nostra, Iasi, Romania

Roman Mogilevsky, CASE, Center for Economic and Social Research, Bishkek, Kyrgyzstan

### **Further Information**

Dr. Rachel Sabates-Wheeler

Poverty and Social Policy Team

Institute of Development Studies

University of Sussex

Brighton BN1 9RE, UK

Tel +44 1273 877007

Fax: +44 1273 621202

Email: [r.sabates-wheeler@ids.ac.uk](mailto:r.sabates-wheeler@ids.ac.uk)

### **Sources**

Sabates-Wheeler, R. and M. Childress (forthcoming): 'Asset-Pooling and Efficiency in Uncertain Times: a Quantitative Analysis.'

Sabates-Wheeler and Others (forthcoming): 'Comparative Perspectives on Small-Scale Cooperatives in Kyrgyzstan and Romania.'

Working Papers will be available from Rachel Sabates-Wheeler and on the Poverty Team site at the IDS website: <http://www.ids.ac.uk/ids/>

### **Key words**

Agriculture + Cooperation + Groups + Policy + Poverty + Resource Access + Rural livelihoods

### **Regions**

Eastern Europe + Romania + Central Asia + Kyrgyzstan

### **Funded by**

SSRU of the Department for International Development (DfID), 2002-2004

Rachel Sabates-Wheeler, July 7<sup>th</sup> 2004

## Appendix 2: Seminar Agenda

### Seminar Agenda

*“Small scale cooperative arrangements in Kyrgyz agriculture”*

on the DFID-funded project implemented by  
Institute for Development Studies (IDS), University of Sussex, UK  
Land Tenure Center (LTC), University of Wisconsin-Madison, USA  
Center for Social and Economic Research CASE-Kyrgyzstan

Thursday, March 18, 2004  
UN House

#### AGENDA

<b>Time</b>	<b>Topic</b>	<b>Speaker</b>
2-30 p.m.	The Challenges of Co-operation for Rural Livelihood Improvement in Transition	Dr. Rachel Sabates-Wheeler, IDS
2-50 p.m.	Asset-Pooling and Efficiency in Uncertain Times: a Quantitative Analysis	Dr. Rachel Sabates-Wheeler
3-20 p.m.	Discussion	
3-45 p.m.	Coffee-break	
4-00 p.m.	Qualitative Analysis of Small-Scale Cooperation	Dr. Malcolm Childress, LTC
4-30 p.m.	Discussion	
4-45 p.m.	Comparative Perspectives on Small-Scale Cooperatives in Kyrgyzstan and Romania	Dr. Rachel Sabates-Wheeler
5-15 p.m. – 5-30 p.m.	Discussion and conclusions	

## Семинар

### *“Малая кооперация в сельском хозяйстве Кыргызстана”*

по проекту, финансируемому Министерством международного развития Великобритании и выполненному

Институтом проблем развития (ИПР), университет Сассекса, Великобритания

Центром землепользования (ЦЗ), университет Висконсин-Мэдисон, США

Центром социально-экономических исследований CASE-Кыргызстан

Четверг, 18 марта 2004 г.

Дом ООН

### ПРОГРАММА

<b>Время</b>	<b>Тема</b>	<b>Докладчик</b>
14-30	Проблемы кооперации в целях повышения жизненного уровня сельских жителей в течение переходного периода	Г-жа Рэчел Сабатес-Вилер, ИПР
14-50	Концентрация активов и эффективность во времена неопределенности: количественный анализ	Г-жа Рэчел Сабатес-Вилер
15-20	Дискуссия	
15-45	Перерыв на кофе	
16-00	Качественный анализ малой кооперации	Г-н Малколм Чилдрес, ЦЗ
16-30	Дискуссия	
16-45	Сравнительный анализ малой кооперации в Кыргызстане и Румынии	Г-жа Рэчел Сабатес-Вилер
17-15 –17-30	Дискуссия и заключение	

**The list of invitees and participants of the workshop**  
**““Small scale cooperative arrangements in Kyrgyz agriculture””**  
**UN House, Bishkek, March 18, 2004**

1	A. Aliev	Center for land and agrarian reform	
2	B. Jeenbaeva	Kyrgyz Agricultural Financial Corporation	participated
3	B. Dautov	World Bank	participated
4	B. Juraev	Legislation Chamber	
5	E. Ibraimova	Village Investment Project, World Bank	participated
6	K. Kadyrkulov	Agricultural Consulting Service	participated
7	A. Kalpakova	Center for land and agrarian reform	participated
8	E. Kasybekov	Counterpart Consortium	
9	A. Kupueva	World Bank	participated
10	K. Kyshtobaev	Development of the Chui Region Project, ADB	participated
12	I. Mukanbaeva	Agrobusiness Development Project, WB	
13	Ch. Nogoibaeva	Soros Foundation	
14	Z. Omorova	ARD/Checchi	participated
15	T. Osmonov	Kyrgyz-Swiss Agricultural Project	participated
16	E. Ryazanov	Support to Private Initiatives Project, Helvetas	
17	S. Rogojnikova	Swiss Development Cooperation	
18	M. Seitova	Kyrgyz-Swiss Agricultural Project	participated
19	E. Solovieva	ARD/Checchi	participated
20	A. Tashirova	DFID	
21	U. Turdubekov	DFID	participated
22	S. Tynaev	Ministry of Agriculture and Water Resources	
23	V. Tyan	ADB	
24	A. Arbenz	Kyrgyz-Swiss Agricultural Project	
25	E. Doran	USAID	
26	P. Geraedts	Kyrgyz-Swiss Agricultural Project	
27	R. Hueksen	GTZ	participated
28	O. Torba	GTZ	participated
29	U. Roesler	GTZ	
30	T. Sexton	DFID	
31	M. Childress	LTC, University of Wisconsin-Madison, USA	participated
32	M. Roth	University of Wisconsin-Madison, USA	participated
33	R. Sabates-Wheeler	IDS, University of Sussex, UK	participated
34	A. Erdolatov	CASE-Kyrgyzstan	participated
35	A. Atamanov	CASE-Kyrgyzstan	participated
36	I. Makenbaeva	CASE-Kyrgyzstan	participated
37	J. Mironova	CASE-Kyrgyzstan	participated
38	R. Brudzynski	CASE-Kyrgyzstan	participated
39	R. Mogilevsky	CASE-Kyrgyzstan	participated

### **Appendix 3:**

## **Institutional Transformation and Agrarian Change in Kyrgyzstan: Sectoral and Micro Perspectives**

Date and Venue to be identified

Roman Mogilevsky, CASE Kyrgyzstan  
Michael Roth, Land Tenure Center, University of Wisconsin-Madison

### **DAY 1, Date ?**

#### **Session 1: Introduction and Overview**

8:30–9:00 Opening Remarks:

#### ***Government of the Kyrgyz Republic, Identify Person***

USAID, *Lena Heron or Gregory Myers*

BASIS CRSP, *Roman Mogilevsky*

#### **Session 2: State of Kyrgyzstan's Agricultural Sector**

9:00-10:45 Macroeconomic Trends and State of Kyrgyzstan's Agricultural Sector, *Presenter to be identified from Government*

Resources, Structure and Profitability of Agricultural Enterprises in Kyrgyzstan: 1999 to 2003 Trends and Future Challenges, *Roman Mogilevsky and Kelley Cormier*

Financing Agricultural Restructuring in the Kyrgyz Republic: Can Donor Capital and New Credit Institutions Fill the Investment Gap, *Alymbek Erdolatov, Malcolm Childress and Roman Mogilevsky*

Comments, Questions and Discussion

10:45-11:15 Tea Break

11:15-12:30 Panel Discussion:

Kyrgyzstan's New Agricultural Policy, *Presenter to be identified from Government of Kyrgyzstan or Civil Society*

Development Credit Authority, *Eamon Doran*

Comments, Questions and Discussion

12:30-2:00 Lunch Break

**Session 3: Panel on Investment and Marketing Constraints**

**2:00-3:30 BASIS Case Study Enterprise, Kooppromservice Ltd, Issyk-Kul Rayon,  
Fruit Juice and Wine Agroprocessor, Presentation by Enterprise Manager**

**BASIS Case Study Enterprise, Aiyl Charba Milk Cooperative in ? Oblast, Presentation by  
Enterprise Manager**

*Regional Presentation. Topic, Country and Presenter to be Identified*

Comments, Questions and Discussion

3:30-4:00 Tea Break

**Session 4: Determinants of Farm Size and Enterprise Dynamics**

4:00-5:45 Dynamics of Farm Enterprise Performance and Agrarian Structure, 1999 to 2001,  
*Michael Roth, Kelley Cormier, and Roman Mogilevsky*

***Asset Pooling in Uncertain Times: Optimal Farm Size and Individual Versus Group Ownership  
Performance, Rachel Wheeler and Malcolm Childress***

General Discussion

5:45-6:00 House Cleaning

7:00 Organized Dinner

**DAY 2, Date ?**

8:15–8:30 Opening Remarks

**Section 5: Institutions and Agrarian Contracts**

8:30-10:30 Best Institutional Arrangements for Farmworker Equity-Share Schemes in South Africa,  
*Mike Lyne and Michael Roth*

Legal Foundations, Business Conduct, and Performance of Case Study Enterprises,  
*Kanat Tilikeyev, Meergul Bobukeeva, and Michael Roth*

Are Rural Women Disadvantaged in Asset Ownership and Business Relations in the  
Kyrgyz Republic, *Renee Giovarelli*

Comments, Questions and Discussion

10:45-11:15 Tea

11:15-1:00 **Comparative Experiences with Contracts and Institutional Change**

***BASIS Case Study Enterprise, Water Users Association Abshir-Tany of Naukat Rayon of Osh Oblast.  
Presentation by Enterprise Manager***

BASIS Case Study Enterprise, Jibek Jolu (Cotton) Farm of Aravan Rayon of Osh Province, *Presentation by Enterprise Manager*

Regional Presentation. Topic, Country and Presenter to be Identified

Panel Comments: *Kanat Tilikeyev and Roman Mogilevsky, CASE based on BASIS-funded study tour to South Africa*

Comments, Questions and Discussion

1:00-1:30 Synthesis and Closing Remarks, Michael Roth

1:30-2:30 Lunch

2:30 Return to Bishkek