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המרכז למחקר בכלכלה חקלאית

המחלקה לכלכלה חקלאית ומנהל

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Cooperatives in Kyrgyzstan:

Findings from a Survey of Cooperatives and Users

By

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Cooperatives in Kyrgyzstan: Findings from a Survey of Cooperatives and Users¹

Zvi Lerman and David Sedik

This study is a contribution to a FAO program intended to provide guidance to policymakers in Kyrgyzstan on the barriers to formation of cooperatives and recommend policies for supporting formation and development of cooperatives in Kyrgyzstan.

Main messages:

- Most cooperatives in Kyrgyzstan are production cooperatives successors of former collective farms.
- There are hardly any "pure" service cooperatives, although production cooperatives partially fulfill the function of service cooperatives by providing farm services also to non-members.
- Cooperatives play a positive role in rural life:
 - o sufficiency of services in any given area improves when cooperatives step in to provide the services;
 - o farmers' perceived wellbeing is higher for cooperative members than for outsiders.
- Taxes are not perceived as a major issue by either cooperative managers or farmers. Tax
 code provisions exempting cooperatives from profit tax and VAT are generally respected.
- Government support plays a minor role in agriculture: most cooperative managers and farmers surveyed report that they do not receive any support. This, however, has not led to a major outcry with demands for more government support in the survey.
- Formal cooperation manifested in membership in cooperatives is very limited among the farmers surveyed. Informal cooperation is much more widespread, and the substantial gap between the frequency of formal and informal cooperation (8% and 22% of farmers surveyed, respectively) clearly suggests that there is a large potential for development and adoption of service cooperatives in Kyrgyzstan.
- Cooperatives in Kyrgyzstan are few in number and widely scattered. More than half the respondents report that there is no cooperative in the vicinity that they can join. Other reasons for not joining a cooperative (fear of losing independence, lack of information about cooperatives) manifest lack of clear understanding of the differences between service and production cooperatives and strongly suggests that cooperative development requires a large-scale information campaign to familiarize the rural population with the working of cooperatives.

¹ This study draws on official data from the Ministry of Agriculture of Kyrgyzstan and the National Statistics Committee, as well as field data from a survey of cooperatives and peasant farms conducted by FAO/REU in the spring of 2012 across the country. The authors are respectively from the Department of Agricultural Economics and Management, The Hebrew University of Jerusalem, Israel and the Regional Office for Europe and Central Asia of the Food and Agriculture Organization of the UN (FAO), Budapest, Hungary.

Western classification of cooperatives

Individualization of agriculture manifested in a sweeping shift from large-scale collective farms to small family farms is the most striking change that the transition has produced in Kyrgyzstan's agricultural sector. Small farms everywhere in the world face essential constraints in their access to market services, and Kyrgyzstan is not an exception in this regard. The main difficulties faced by smallholders include difficulties with access to sales channels for farm products, difficulties with access to supply channels for farm inputs, difficulties with purchase of farm machinery and transportation equipment, and difficulties with access to agricultural extension and market information. Best-practice world experience suggests that farmers' service cooperatives provide the most effective way of improving the access of small farmers to market services in areas where no private intermediaries operate or where private intermediaries unfairly exploit farmers through monopolistic practices. Such cooperatives can cover the whole field-to-market value chain, including joint purchase of farm inputs, attention to water distribution and irrigation (through Water User Associations), organization of machinery pools for field work, establishment of sorting and packing facilities, transport of farm products to markets, processing, etc. They can also provide agricultural extension and market information services, as well as veterinary and artificial insemination services, all of which are essential for productivity improvement in both crop and livestock production. Recognizing these positive roles of agricultural service cooperatives for the rural population, the agricultural development strategies for Kyrgyzstan emphasize the development of service cooperatives as one of the priorities.

International Cooperative Alliance (ICA) defines a cooperative as an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically-controlled enterprise. These principles are fully acknowledged in the 2005 Kyrgyzstan Law of Cooperatives. A cooperative is a legal entity and in a certain sense it is an analogue of a shareholder corporation. However, business corporations aim to maximize their profit, whereas cooperatives aim to maximize the benefits that members derive from their participation in cooperative activities, including lower prices paid for inputs and services and higher prices received for products

The Western cooperative paradigm distinguishes between *production cooperatives* and *service cooperatives*.

Production cooperatives are cooperatives in which members are jointly engaged in the production process. In agricultural production cooperatives, members jointly cultivate cooperatively held agricultural resources, such as land or farm machinery, producing a variety of farm products. Collective farms in the former Soviet Union and kibbutzim in Israel are examples of agricultural production cooperatives. Members of production cooperatives do not engage in independent farming on their land, with the possible exception of production on the family's household plot. Production cooperatives sell their output to outsiders; yet the main function of production cooperatives is to

improve the wellbeing of their members by creating conditions for more efficient farming than what would otherwise be feasible in individual farms.

It is often argued that by allowing members to pool their fragmented smallholdings into large farms production cooperatives exploit economies of scale and achieve higher efficiency. Yet empirical studies in market economies show that economies of scale do not generally exist in primary agriculture and many researchers have in fact shown that agricultural production cooperatives are substantially less efficient than individual and family farms. As a result, production cooperatives in the world are a tiny minority among producers. According to ICA data, production cooperatives account for less than 5% of all cooperatives in the world

Service cooperatives, on the other hand, are the largest and most typical category of cooperatives in developed and developing countries: these are cooperatives that provide services to their members-producers, who continue to carry out all production activities independently on their own land. In contrast to the minor role of production cooperatives in market economies, service cooperatives in many countries account for a large share of transactions in the relevant economic sector. For instance, agricultural marketing, processing, and supply cooperatives are major players in markets for farm products and farm inputs in North America, Western Europe, Japan, and South-East Asia. In the U.S., agricultural cooperatives handle about 30% of farmers' total farm marketing volume and 28% of farmers' total supply purchases. In the European Union, the share of agricultural cooperatives is even larger: in countries such as the Netherlands, Denmark, Ireland, and Sweden 70%-80% of farm products are marketed through cooperatives and cooperatives account for 50%-70% of all farm input purchases.

Service cooperatives may actually employ some of their members as workers, but most employees (and even most managers) are hired outsiders. Service cooperatives use members' share contributions to capital and borrowed funds to finance purchase of goods and services from various market sources and then resell these services to members at advantageous prices. Agricultural service cooperatives are usually subdivided into marketing cooperatives, processing cooperatives, input supply cooperatives, and farm machinery cooperatives.

Because of the prevalence of agricultural service cooperatives in the West, the term "cooperative" in market economies is automatically interpreted as a service cooperative. In Kyrgyzstan, as in all CIS countries, the term "cooperative is automatically understood as a production cooperative – the model of a former *kolkhoz* or collective farm. Although the 2005 Kyrgyzstan Law of Cooperatives attempts to characterize the differences between production and service cooperatives, there is much confusion among the rural population and even among policy makers about the actual nature of the two types of cooperatives: the Soviet-style production cooperative to which rural people had been exposed for decades and the Western-style service cooperative advocated by international experts.

Data sources on agricultural cooperatives in Kyrgyzstan

Some statistics on cooperatives in Kyrgyzstan have been available from two sources: a special unit dealing with cooperative development in the Ministry of Agricultural (largely without proper budgets or strategic guidance since 2008) and National Statistics Committee (NSC). MinAg reports the number of *registered* cooperatives, which showed impressive growth over time, rising from about 300 in 2004 to 1,300 in 2009 (**Figure 1**). NSC, on the other hand, based its reporting on the number of *active* (operating) cooperatives. The gap between the two sources is dramatic (**Figure 1**): in 2011, MinAg reported more than 1,400 registered cooperatives, while according to NSC there were just 400 active cooperatives in the country (Kyrgyzstan in Numbers, 2012). It thus became apparent that more than 70% of registered cooperatives in Kyrgyzstan were inactive and existed only on paper, presumably with the intent of taking advantage of future credit or taxation benefits that might materialize through government policies.

The dominant majority of registered cooperatives in MinAg statistics are production cooperatives, not service cooperatives. In 2009, 88% of the registered cooperatives were classified as production cooperatives and only 12% were service and processing cooperatives. Unfortunately, the existing statistics are limited to the number of cooperatives: there are no data on land endowments, sales volumes, or the size of membership. Special surveys have to be conducted to elicit any functional information.

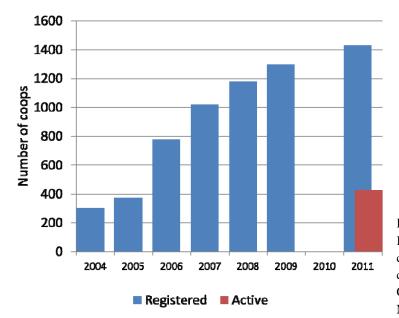


Figure 1. Development of cooperatives in Kyrgyzstan 2004-2011. Blue bars: registered cooperatives from MinAg; red bar: active cooperatives from National Statistics Committee (Kyrgyzstan in Numbers, National Statistics Committee, 2012).

² These numbers do not include credit unions, created mainly by the Raiffeisen Foundation in Kyrgyzstan (some 300 in 2009).

FAO initiated such a survey of cooperatives in Kyrgyzstan in 2012 (FAO/REU survey, 2012). The sample frame for the survey consisted of the 400 active cooperatives in the NSC database. The original objective was to survey a sample of 100 cooperatives from the NSC list, collecting information mainly on service cooperatives, with control information on some production cooperatives. This objective could not be achieved, however, because virtually no pure service cooperatives were found in the NSC database. Among 400 active cooperatives in the NSC list, only 17 were identified as mixed service/production cooperatives and 3 as trade/service cooperatives (these were apparently closest to pure service cooperatives). All these 20 service-oriented cooperatives were included in the survey sample, which additionally included 37 entities identified as agricultural production cooperatives for a total sample of 57 respondents. Given the composition of the NSC list, the cooperative sample after the fact was neither random nor proportional. In addition to cooperatives, the survey also covered 1,000 peasant farmers randomly selected across the country, in proportion to the total number of peasant farms in each oblast. These respondents provided insights on the relations between users and cooperatives. The sample structure is presented in Table 1.

Table 1. Sample of cooperatives and peasant farms in the 2012 FAO/REU survey in Kyrgyzstan

Oblast	Cooperatives		Peasant farms		
	N	% of sample	N	% of sample	
Chui	15	26.3	180	18.0	
Batken			18	1.8	
Issyk-Kul'	15	26.3	89	8.9	
Jalal-Abad	6	10.5	285	28.5	
Naryn			101	10.1	
Osh	15	26.3	247	24.7	
Talas	6	10.5	80	8.0	
Total	57	100.0	1000	100.0	

Functional typology of cooperatives surveyed

Judging by their asset base and activity profile, 52 of the 57 cooperatives surveyed were in fact production cooperatives. They all reported that they cultivated some agricultural land – a clear distinguishing characteristic of a production cooperative. The land in cooperatives was typically contributed by the members, who were the source for 57% of total agricultural land in the sample; another 27% of land in cooperatives was leased from the municipality or the state. Virtually all cooperatives (51 out of 57) reported that they engaged in agricultural production – predominantly crops, with mixed crop-livestock farming in 11 of the 51 cooperatives. In other words, practically all the cooperatives painstaking selected from official registers are actually production cooperatives, with not more than 6 out of 57 cooperatives in the sample possibly qualifying as service cooperatives (these are the six without primary production activities).

Service activities of the cooperatives

In addition to primary production, all cooperatives reported providing services to both members and non-members. A production cooperative, in addition to providing services to the joint production process where members work, also supplies inputs to individual production in members' subsidiary household plots and sells some of its surplus inputs to non-members (for a higher price). Provision of services to members and non-members is thus a typical feature of production cooperatives and does not necessarily identify the cooperative as a service cooperative.

Table 2. Services provided by cooperatives in the sample (n=57)

Category of service	For members	For non-members
Sales of farm products	70	19
Storage	74	23
Packing	52	21
Processing	56	18
Fertilizer application	67	12
Machinery services	65	28
Transportation	58	33
Soil melioration	42	21
Information	35	19
Veterinary	30	9
Marketing services	26	12
Purchased inputs	26	5
Advisory	21	11
Construction	19	5
Average	46	17

Source: FAO/REU survey (2012).

Table 2 shows the percent of cooperatives in the sample that provide various services to their members and non-members. The frequency of services to members is substantially higher than the frequency of services to non-members (46% compared with 17% averaged over 14 service categories). The main services provided by more than 50% of cooperatives to members include marketing of farm products (sales, storage, packing, and processing), fertilizer application, mechanical field services, and transportation. Mechanical field services and transportation are also the most common services provided to non-members, presumably because the local production cooperative is the main source of farm machinery and vehicles in rural areas. This, combined with the relatively high percentage of cooperatives providing access to storage facilities for non-members, is a clear illustration of the positive role that cooperatives play in overall rural development.

A direct indication of the positive role that cooperatives play in rural life is provided by the results shown in **Figure 2**. Here each dot represents one of 15 different services, such as storage of farm products, machinery services, input purchases, product sales, and so on. For each of these services the cooperative managers were asked if their cooperative supplied the particular service and to what

extent the local demand for the service was satisfied in their opinion (fully satisfied, partially satisfied, not satisfied). The vertical axis in **Figure 2** plots the percentage of cases when the demand for each service was fully satisfied; the horizontal axis is the percentage of cases when the service was delivered by the coop. There is a clear positive correlation between the frequency of cases when the local demand for the service was fully satisfied and the frequency of cases when the particular service was delivered by the coop. Service sufficiency thus clearly improves when cooperatives step in as service providers.

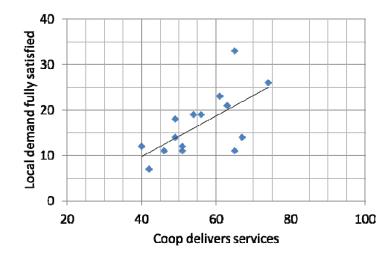


Figure 2. Local service sufficiency increases with the percent of cooperatives that deliver the service. Source: FAO/REU survey (2012).

Taxation and financial performance of cooperatives

Two-thirds of cooperatives surveyed pay taxes, with land tax figuring as the main tax (67% of respondents). The next in importance is the obligatory social tax, which is reported by 40% of the cooperatives. Profit tax and VAT are reported by very few cooperatives (17% and 2%, respectively). This can be regarded as evidence that tax authorities generally respect the tax code provisions explicitly exempting cooperatives from these taxes.

Taxes do not appear to be a major burden for cooperatives, as less than 10% listed reduction of taxes among the demands for support from the government. The main areas in which tax reductions were desired include purchase and leasing of farm machinery (18% of respondents), construction services (17%), and sales of farm products (16%).

Fully 80% of cooperatives surveyed do not receive any support from the government and more than 40% state that they do not require any support. Between 10% and 15% of the cooperatives expect to receive government support in the form of subsidized prices, subsidized credit, and – importantly – training.

All this can be interpreted as signs of satisfactory financial performance. Indeed, the majority of cooperatives (58%) report their financial situation as stable or profitable and only the remaining 42% are loss-making.

Farmers' attitudes toward cooperation

Cooperation is expected to alleviate the difficulties that farmers face in their farm operations, and farmers' perception of difficulties therefore provides an indication of the need for cooperation. Most farmers reported that they faced difficulties due to shortage of inputs (fuel, fertilizer, chemicals, seeds) and inadequate access to farm machinery, including lack of machinery leasing options (**Figure 3**). Other difficulties, notably difficulties with product sales, access to financial sources, and veterinary services, were highlighted with lower frequency, but still by more than 20% of respondents. Difficulties that are routinely mentioned in various reports, such as high taxes, lack of agricultural experience, shortage of manpower, and insufficient land were reported by 10%-15% of respondents and can be regarded as relatively minor. The pressing difficulties – those reported by more than 20% of respondents in **Figure 3** – are precisely the problem areas that cooperatives are designed to overcome.

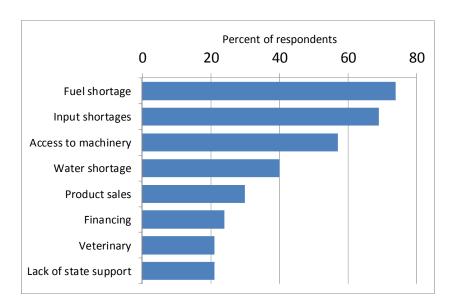


Figure 3. Most pressing difficulties faced by farmers in their operations (n=1000). Source: FAO/REU survey (2012).

Two areas of pressing difficulties in **Figure 3** deserve special mention. Water shortages (reported by 40% of respondents) are an endemic problem in Kyrgyzstan. The creation of Water User Associations was expected to alleviate these difficulties, and although almost half the respondents are members in these associations, this form of cooperation according to the survey has so far failed to produce a significant effect on water shortages (30%-40% complain of water shortages among both WAU members and non-members). Lack of state support is a general macro-economic problem not necessarily within the competence of cooperatives, but an association of farmers clearly has more lobbying power in this respect than each individual farmer separately. Cooperatives may be in a better position to secure state support for their members than individuals for themselves.

Informal cooperation is quite widespread among farmers in Kyrgyzstan. Fully 22% of farmers surveyed participate informally in some joint activity with other nearby farmers (**Figure 4**). Joint use of farm machinery and transport facilities is the most common, reported by 17% and 14% of

respondents respectively. There is obviously an acute need for these services that cannot be met by individual means, as cooperatives also report provision of mechanical services and transport with high frequency to both members and non-members (see above). Joint sales of farm products, joint purchase of inputs, and joint processing are also reported, although with lower frequency of between 5% and 10% of respondents. It is somewhat surprising to find that 10% of peasant farmers surveyed report informal cooperation in agricultural production outside a production cooperative.

Machinery

Informal cooperation: joint activities

Figure 4. Informal cooperation in various activities among family farms. Source: FAO/REU survey (2012).

On the other hand, formal, organized cooperation is very limited among peasant farmers in Kyrgyzstan. Only 8% of the 1,000 farmers surveyed (78 respondents) are members of an agricultural cooperative and fully 50% do not belong to any association. It is noteworthy that 46% are members in Water User Associations, which presumably have established themselves as an effective institution for water management – not without large-scale promotion campaigns by the government and the World Bank.

ANY Joint

Among the small number of farmers who are members of a formal cooperative (78 respondents), over 50% enjoy four main services: farm machinery, sales of farm products, supply of fertilizers, and quality seeds (**Table 3**). Furthermore, 56% of these farmers produce independently, i.e., they receive services from their cooperative without engaging in joint agricultural production. The survey thus distinguishes between two groups of cooperative members among peasant farmers: 44% are in effect members of a production cooperative and receive services as such; 56% are in effect members of a service cooperative, or rather a service component of a production cooperative: they receive services from the cooperative while continuing to produce independently. These farmers represent the non-member contingent of service recipients shown in **Table 2**.

Table 3. Participation of cooperative members in various services and activities (percent of respondents)

Area of cooperation	All coop	Members who	Members who do	Satisfaction
	members	participate in not participate in		rating among
	(n=78)	joint production	joint production	those using the
		(n=34)	(n=44)	activity
Joint production	44	100	0	59
Machinery for field work	59	85	39	61
Product sales	54	79	34	64
Seed supply	55	88	30	67
Fertilizer/chemicals supply	54	88	27	62
Agricultural processing	33	56	16	58
Animal feed	37	65	16	55
Average satisfaction rating				61

Source: FAO/REU survey (2012).

Members in service cooperatives (i.e., those who do not participate in joint production) receive basically the same services as members in production cooperatives. However, the frequency of these services for farmers who are only members of the service cooperative (i.e., do not participate in joint production) is lower than the frequency for those who participate in joint production, although the relative ranking is the same. In other words, farm machinery, sales of farm products, supply of fertilizers, and quality seeds are the most frequently enjoyed services for both groups of cooperative members.

Cooperative members are generally satisfied with the services they receive from the cooperative: on average, over 60% of members who actually use the various services report that they are satisfied.

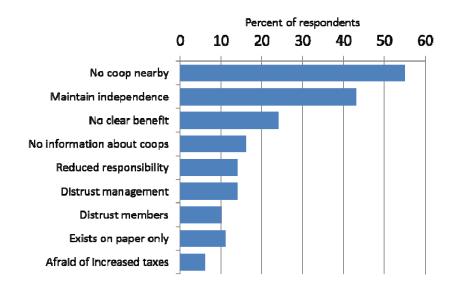


Figure 5. Reasons for not becoming a cooperative member. Source: FAO/REU survey (2012).

The substantial gap between the frequency of formal and informal cooperation (8% and 22% of farmers, respectively) clearly suggests that there is a large potential for development and adoption of service cooperatives in Kyrgyzstan. Why are farmers reluctant to join a cooperative? The main

reason cited by the respondents is that there is no cooperative in the vicinity that they can join (55%; see **Figure 5**). The second most frequently cited reason is that the respondents wish to preserve their independence (42%). This probably reflects the ingrained influence of Soviet-style production cooperatives, which generally did not observe the basic principles of voluntary participation and democratic governance. Loss of independence does not apply to service cooperatives, and this reason is clearly a facet of the lack of clear understanding of the differences between service and production cooperatives. About 15% of respondents attribute their not joining a cooperative by insufficiency of information about cooperatives, which strongly suggests that cooperative development requires a large-scale information campaign to familiarize the rural population with the working of cooperatives. The universal issue of lack of trust in managers and other members is cited by more than 10% of respondents. Finally, the danger of increased taxation for cooperative members does not seem to be a problem: only 6% of respondents raise this issue. This finding for potential members is consistent with the generally relaxed attitude of cooperative managers toward taxation (see above).

Effect of cooperation on farmers' wellbeing

Farmers' wellbeing was explored in the survey through two qualitative questions. One question, probed the absolute perceived level of wellbeing by asking "how do you rate your family's financial situation" and another question probed the relative perceived wellbeing by asking "how would you assess your family's financial situation relative to other families in the village".

The respondents classified their absolute perceived wellbeing into five categories:

- 1 -family income is hardly sufficient to buy food,
- 2 family income is sufficient for basic necessities
- 3 family income is sufficient to buy also clothes and footwear
- 4 the family can satisfy all its daily needs, but cannot purchase durables
- 5 we do not experience any financial difficulties.

For purposes of statistical analysis, the five categories were aggregated into two levels: categories 1, 2, 3 were jointly characterized as "basic level of wellbeing" and categories 4, 5 were grouped into "comfortable level of wellbeing".

Survey results indicate that cooperation – either informal or formal – has a strong positive effect on family wellbeing. **Table 4** summarizes the findings. Among farmers who cooperate informally with other farmers, fully 68% perceive their wellbeing level as comfortable, compared with just 54% among those who do not cooperate with other farmers. Similarly among farmers who participate in formal cooperation as members of an agricultural cooperative, 74% perceive their wellbeing level as comfortable, compared with just 55% for those who are not cooperative members. In both cases the difference is statistically significant by the chi-square test. When formal cooperation is further broken down into membership in a production cooperative (engaging in joint production) and membership in a service cooperative (receiving services without participation in joint production),

members in production cooperatives appear to have a slight edge in perceived wellbeing compared to members in service cooperatives (**Table 4**), but the difference is not statistically significant.

Table 4. The effect of cooperation (informal and formal) on absolute perceived wellbeing

Wellbeing	Informal cooperation		Formal cooperation			
level	No informal cooperation (n=758)	Informal cooperation (n=195)	Not cooperative member (n=876)	Cooperative member (n=77)	Member in production cooperative (n=33)	Member in service cooperative (n=44)
Basic	46*	32*	45^	26^	18	32
Comfortable	54*	68*	55^	74^	82	68
Total	100	100	100	100	100	100

^{*,} $^{\wedge}$ – differences between categories statistically significant by chi-square test (p = 0.10).

The question that probed the relative wellbeing level by asking "how would you assess your family's financial situation relative to other families in the village" received the following answers:

- 1 better than the rest,
- 2 worse than the rest,
- 3 same as the rest

Here again cooperation has a strong positive effect on relative wellbeing, but this is observed only for formal cooperation through membership in a cooperative, and no such effect is observed for informal cooperation. Furthermore, the advantage of membership in production cooperatives compared to service cooperatives is expressed more strongly than in the previous case, and the difference between relative wellbeing of members in production cooperatives and service cooperatives is now statistically significant. The findings are summarized in **Table 5**.

Table 5. The effect of cooperation (informal and formal) on absolute perceived wellbeing

Relative	Informal c	cooperation	Formal cooperation			
wellbeing	No informal	Informal	Not	Cooperative	Member in	Member in
	cooperation	cooperation	cooperative	member	production	service
	(n=766)	(n=196)	member	(n=74)	cooperative	cooperative
			(n=888)		(n=31)	(n=43)
Better than	22	21	20*	36*	48^	28^
the rest						
Same as the	65	65	66*	54*		
rest					52^	72^
Worse than	13	15	14*	9*	32	12"
the rest						
Total	100	100	100	100	100	100

^{*,} $^{\wedge}$ – differences between categories statistically significant by chi-square test (p = 0.10).

Conclusions

Most registered agricultural cooperatives in Kyrgyzstan appear to be production cooperatives – successors of former collective farms. They mainly engage in primary production on collectively held land, and provide services to non-members merely as a byproduct of their joint production activities. The rural population is not clear on the fundamental differences between production and service cooperatives and the benefits that can be derived from membership in a proper service cooperative. Government strategy documents do not distinguish with sufficient clarity between the two types of cooperatives, which only exacerbates the confusion. This situation suggests the need for a broad public awareness campaign to familiarize the rural population with the working and benefits of service cooperatives, thus encouraging bottom-up development of service cooperatives.

Cooperatives in Kyrgyzstan are few in number and widely scattered. More than half the respondents in the FAO/REU 2012 survey report that there is no cooperative in the vicinity that they can join. Other reasons for not joining a cooperative, e.g., fear of losing independence and lack of information about cooperatives, manifest lack of clear understanding of the differences between service and production cooperatives.

Formal cooperation as manifested in membership in cooperatives is very limited among the farmers surveyed. Informal cooperation is much more widespread, and the substantial gap between the frequency of formal and informal cooperation (8% and 22% of farmers surveyed, respectively) clearly suggests that there is a large potential for development and adoption of service cooperatives in Kyrgyzstan. Furthermore, most farmers reported that they faced difficulties due to shortage of inputs (fuel, fertilizer, chemicals, seeds) and inadequate access to farm machinery, including lack of machinery leasing options. Other difficulties, notably difficulties with product sales, access to financial sources, and veterinary services, were highlighted with lower frequency, but still by more than 20% of respondents. These pressing difficulties reported by more than 20% of respondents are precisely the problem areas that cooperatives are designed to overcome.

Difficulties that are routinely mentioned in various reports, such as high taxes, lack of agricultural experience, shortage of manpower, and insufficient land were reported by 10%-15% of respondents and can be regarded as relatively minor. Taxes are not perceived as a major issue by either cooperative managers or farmers. Tax code provisions exempting cooperatives from profit tax and VAT are generally respected.

Government support plays a minor role in agriculture: most cooperative managers and farmers surveyed report that they do not receive any support. This, however, has not led to a major outcry with demands for more government support in the survey. This probably suggests that information and training are more important than direct financial support for cooperative development.

The survey clearly shows that cooperatives play a positive role in rural life. Thus, sufficiency of services in any given area improves when cooperatives step in to provide the services and farmers' perceived wellbeing is higher for cooperative members than for outsiders.