

منظمة  
الأغذية والزراعة  
للأمم المتحدة

联合国  
粮食及  
农业组织

Food and Agriculture  
Organization of the  
United Nations



Organisation des  
Nations Unies pour  
l'alimentation et  
l'agriculture

Продовольственная и  
сельскохозяйственная  
организация  
Объединенных Наций

Organización de las  
Naciones Unidas para la  
Agricultura y la  
Alimentación

**FAO Regional Office for Europe and Central Asia**  
*Policy Studies on Rural Transition No. 2013-4*

**Cooperative development in Central Asia**

**Zvi Lerman**

**2013**

The Regional Office for Europe and Central Asia of the Food and Agriculture Organization distributes this policy study to disseminate findings of work in progress and to encourage the exchange of ideas within FAO and all others interested in development issues. This paper carries the name of the authors and should be used and cited accordingly. The findings, interpretations and conclusions are the authors' own and should not be attributed to the Food and Agriculture Organization of the UN, its management, or any member countries.

Zvi Lerman has completed work for FAO in Central Asia on cooperatives in both Tajikistan and Kyrgyzstan. He was the main consultant on a survey of farms and cooperatives in Kyrgyzstan. He previously worked on cooperative legislation in Tajikistan, and he has experience in policy issues dealing with cooperatives throughout the REU region. Mr Lerman is a professor at the Department of Agricultural Economics and Management of the Hebrew University where he previously taught a course on agricultural cooperatives for many years.

This paper was prepared within the “Cooperatives and their alternatives” component of the Agrarian Structures Initiative (ASI) which is a regional program of FAO in Europe and Central Asia. The aim of this project is to identify the advantages, disadvantages of integrating small farms into markets through farmer cooperative groups and direct contracting in the region. Studies are prepared in different countries of the region to understand the enabling environment for these institutional innovations, and to propose policy changes in order to develop inclusive and fair value chains.

More information on the Agrarian Structures Initiative and its projects is available here: <http://www.fao.org/europe/agrarian-structures-initiative/en/>

## Contents

<b>1. Introduction</b> .....	4
<b>2. Conceptual Issues of Agricultural Cooperative Legislation in Central Asia</b> .....	5
Smallholder Agriculture and the Rationale for Service Cooperatives .....	5
Western Classification of Cooperatives.....	7
Classification of Cooperatives in Legislation in Central Asia .....	10
Need for Consistent Definitions .....	14
<b>3. Taxation of Cooperatives</b> .....	16
Exemption from Value Added Tax .....	16
Exemption from Retail Sales Tax.....	17
Exemption of Distributions to Members from Profit Tax .....	17
<b>4. Observations from the Field: Cooperatives in Tajikistan and Kyrgyzstan</b> .....	21
Fledgling Service Cooperatives in Tajikistan .....	21
Dominance of Production Cooperatives in Kyrgyzstan .....	23
<b>5. Cooperative Development Policy for Central Asia</b> .....	29
World Practice and Central Asia .....	29
Promoting Cooperatives: Information Campaign and Legal Framework for Cooperatives .....	31
Development of a Multi-level Cooperative System for Denser Coverage .....	32
<b>REFERENCES</b> .....	34
<b>FAO Policy Studies on Rural Transition</b> .....	36
<b>List of figures and tables</b>	
<b>Figure 1.</b> Schema of a service or consumer cooperative .....	10
<b>Figure 2.</b> Schema of a production cooperative.....	10
<b>Figure 3.</b> Development of cooperatives in Kyrgyzstan 2004-2011.....	23
<b>Figure 4.</b> Local service sufficiency of cooperatives that deliver service. ....	25
<b>Figure 5.</b> Informal cooperation in various activities among family farms. ....	26
<b>Figure 6.</b> Reasons for not becoming a cooperative member.....	28
<b>Table 1.</b> Comparative attributes of a cooperative and a shareholder corporation .....	7
<b>Table 2.</b> Cooperative legislation in Central Asia 1991-2013 .....	11
<b>Table 3.</b> Classification of cooperatives in Central Asian legislation.....	13
<b>Table 4.</b> Functions of “production cooperative” as defined in the 1999 Civil Code of Tajikistan (Art. 188) and their classification according to Western views of production, service, and consumer cooperatives .....	13
<b>Table 5.</b> Schematic “profit and loss” statement of a cooperative .....	18
<b>Table 6.</b> Allocation of profit in a service cooperative .....	19
<b>Table 7.</b> Services provided by cooperatives in the sample (n=57).....	24
<b>Table 8.</b> Participation of cooperative members in various services and activities .....	27

# 1. Introduction

Five countries of the former Soviet Central Asia – Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan – have made huge strides in their efforts to reform tenure rights in agricultural land and change the traditional Soviet-style farming structure to a model closer to market principles (Lerman and Sedik, 2009). Two of the five countries – Kazakhstan and Kyrgyzstan – now recognize private ownership of agricultural land and allow land market transactions; Tajikistan retains state ownership of land but nevertheless allows land market transactions in the guise of transferable land use rights; only Uzbekistan and Turkmenistan retain the Soviet model of state-controlled rigidly nontransferable land, but even in these two countries land use and agricultural production have massively shifted from large collective farms to small leaseholders. The individualization of Central Asian agriculture has largely driven the impressive recovery in agricultural production that we are witnessing since about 1998 across the region. While much remains to be done in the area of land reform and farm restructuring until Central Asia closes the gap between the administrative-command tradition and market agriculture (EBRD, 2012, Table A.1.1.2), the focus of attention has begun to shift to post-restructuring measures intended to ensure viability and profitability of the smallholder farms by counteracting the negative effects of smallness.

In developed economies, the access of small farmers to markets is usually facilitated by agricultural service cooperatives. They act as integrators of farm product sales and farm input supplies for whole groups of smallholders; they provide pooled machinery services in cases when an individual small farmer cannot purchase his own machines; they negotiate loans and credit terms with commercial banks from positions of strength (Cobia, 1989). There are hundreds of thousands of such service cooperatives in the world with hundreds of millions of member farmers. Central Asian agriculture, with its multitude of small family farms and underdeveloped market channels, seems to be ripe for the emergence of service cooperatives, and yet their development has been slow and halting. Instead of Western-style service cooperatives, the very concept of cooperative in Central Asia is automatically interpreted as a production cooperative, i.e., a model of the Soviet-style collective farm (Plunkett Foundation, 1995).

The purpose of this paper is to introduce Central Asian policy makers to the Western paradigm of service cooperative and to explore the constraints – both physical and ideological – to faster development and acceptance of cooperatives. We also discuss the need for a complete reorientation of the government's approach to cooperative development. The main message is that the government should focus on provision of public goods, such as information, education, and training in the cooperative arena, and desist from interfering in allocation of credits and financial support, which in the past led to inefficiency and rampant corruption.

## **2. Conceptual Issues of Agricultural Cooperative Legislation in Central Asia**

### ***Smallholder Agriculture and the Rationale for Service 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 all CIS countries. Agriculture in Central Asia is now based primarily on smallholders – peasant farms and household plots (Lerman and Sedik, 2009). These small producers control the major part of agricultural land and livestock, and they produce most of Gross Agricultural Output (GAO) across the region. Small farms everywhere in the world face essential difficulties and constraints in their access to market services, and Central Asia is not an exception in this regard. The main difficulties faced by smallholders include:

- difficulties with access to sales channels for market products,
- difficulties with access to supply channels for farm inputs,
- difficulties with purchase of farm machinery and transportation equipment,
- difficulties with access to information and advisory services, which are essential for raising productivity and efficiency,
- limited access to credit resources, which are required to finance short-term working capital and long-term investment needs.

These difficulties combine to create what is sometimes referred to as “the curse of smallness”, a trap that prevents smallholders from fully exploiting their inherent productivity advantages due to barriers in access to markets (Abele and Frohberg, 2003).

In developed market economies, farmers typically achieve access to markets through private intermediaries. Such private intermediaries are beginning to emerge in Central Asia in a variety of forms, which include integrators for collection and sale of farm products, private processors buying wholesale from farmers, providers of rental machinery services, or distributors of farm inputs to remote villages. These private service providers fulfil a crucial function for rural development: they free the farmers from the need to travel to the marketplace and enable them to concentrate on agricultural production. So far, however, private rural intermediaries are relatively rare in Central Asia and do not satisfy the needs of the huge number of peasant farms and household plots in the region. In such cases in market economies farmers organize self-help bodies – so-called service cooperatives, whose function is to correct market failure by allowing alternative access to markets without relying on private service intermediaries.

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 (Cobia, 1989). 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.

Typical functions of an agricultural service cooperative can be described as follows:

- the cooperative purchases farm inputs in bulk for all its members and is thus able to negotiate lower prices and better terms through volume discounts;
- the cooperative delivers and sells products from all its members jointly, thus breaking through minimum-quantity barriers imposed by some large buyers and chains (in addition to freeing the farmers from the need to travel in person to the marketplace);
- the cooperative establishes processing facilities to create value added for its members, while guaranteeing fair prices and terms for raw materials delivered by its members;
- the cooperative maintains a pool of farm machinery and transport vehicles to serve all its members, thus freeing small farmers from the need to purchase expensive equipment on their own;
- the cooperative negotiates with the banks relatively large amounts of credits for the entire contingent of its member-farmers, thus achieving better terms and lower interest rates than each small farm would have achieved for itself.

In dealing with a service cooperative, the market effectively deals with a relatively large entity that combines many smallholders into a single negotiating position. Access difficulties imposed by smallness are thus automatically lifted. Service cooperatives overcome the “curse of smallness” by conducting market transactions for a large number of small farmers simultaneously.

Service cooperatives do not rule out private initiative: private trade intermediaries, integrators, and service providers may co-exist with service cooperatives and continue their currently developing operations. In parallel with encouraging the development of service cooperatives for the benefit of small farmers, government policies should also encourage and facilitate the operation of rural private intermediaries – by simplifying licensing arrangements, implementing more flexible inspection procedures, cultivating a generally friendly and helpful attitude among the local officials, and perhaps granting tax credits on transactions with agricultural producers. The government should also consider establishing special credit facilities for expansion of business activities of such rural intermediaries. Service cooperatives as an example of self-organization in the rural sector are created “bottom-up” and farmers obviously need guidance on how to create such institutions. Providing such guidance is the function of special information and training systems that the government or donors should establish for the development of cooperatives. Furthermore, new cooperatives may require support through grants or subsidized credit, but the self-organizing nature of the system of cooperatives ensures relatively easy rollout to remote rural locations. An important component for successful development of service cooperatives (as well as private support services) is a change in government attitude: instead of persisting in

the negative attitude of total neglect and disdain of household plots and small family farms, government officials and decision makers have to acknowledge their importance, abandon the traditional preference for large farms, and focus on policies that ensure a supportive market environment for successful operation of the small-farm sector – including policies to encourage creation of service cooperatives. This change of attitude will require a comprehensive “re-education” effort in all ministries and should probably be guided from the level of the central government.

## **Western Classification of Cooperatives**

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 (ICA, 2013). The persons who voluntarily unite to form a cooperative are usually referred to as members or member-owners, and one of the key attributes of membership is active participation in the activity of the cooperative (whether economic, business, or social). A cooperative is a legal entity and in a certain sense it is an analogue of a shareholder corporation. There are, however, some fundamental differences between a cooperative and a corporation, as listed in **Table 1**.

**Table 1. Comparative attributes of a cooperative and a shareholder corporation**

<b>Attribute</b>	<b>Cooperative</b>	<b>Corporation</b>
Owners	Members	Shareholders–investors
Owners’ objective	Use of services provided by the cooperative	Earning income
Organization’s objective	Maximize members’ benefits from working with the cooperative	Maximize corporate profits
Voting rights	One member–one vote, regardless of share contribution	Number of votes proportional to number of shares (i.e., share contribution)
Income distribution rules	Income distributed to members in proportion to their participation in the activity of the cooperative	Income distributed to shareholders in proportion to the number of shares held

Perhaps the main difference concerns the organization’s objective: while business corporations aim to maximize their profit, 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 (Cobia, 1998).

The Western cooperative paradigm distinguishes between *production cooperatives*, *service cooperatives*, and *consumer cooperatives* based on their functional characteristics.

**Production cooperatives** are cooperatives in which members are jointly engaged in the production process – irrespective of whether this is production of manufactured goods, agricultural commodities, or services. These may include:

- Manufacturing cooperatives, usually called employee owned or labor managed firms. They used to be very popular in former Yugoslavia before 1989, but they are also observed in Western countries (Mondragon Cooperative Corporation in Spain, Ha’Argaz Metal Works in Israel, and others).
- Agricultural production cooperatives, in which 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.

- Cooperatives that produce services for sale to the general public (Avis Rent-A-Car world-wide, United Airlines in the U.S., Egged Transportation Cooperative in Israel, and others). These are usually characterized as employee owned or labor managed firms (like manufacturing cooperatives): they are not called “service cooperatives”, because this term is reserved for cooperatives that sell services to members, not third parties (the sales clientele criterion).

Production cooperatives sell their output to outsiders; yet the main function of production cooperatives is to improve the wellbeing of their members by providing jobs and working conditions that are superior to what would otherwise be available in the market.

The rationale for the creation of production cooperatives is notionally the same as for service cooperatives. In agriculture, for instance, 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 organizations that produce manufactured goods, agricultural products, or services. 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: these are cooperatives that provide services to their members-producers,<sup>1</sup> who continue to carry out all production activities independently on their own. 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 (see below) 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 (Mather et al., 2004). 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 (Van Bakkum and Van Dijk, 1997).

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.

---

<sup>1</sup> For this reason, service cooperatives are sometimes called in English “producer’s cooperatives” (as distinct from “production cooperatives”), or “farmer’s cooperatives” in agriculture. In Russian this term would be translated as кооперативы производителей (*kooperativy proizvoditelei*), to distinguish it from производственные кооперативы (*proizvodstvennye kooperativy*), which is the accepted Russian term for “production cooperatives”.

Service cooperatives exist in many different areas of economic activity. Agricultural service cooperatives are usually subdivided into:

- **Marketing cooperatives:** cooperatives that collect and prepare members' produce for sale, truck it to the market, and arrange for actual sale at prices that are higher than what would be normally attained by the farmers themselves;
- **Processing cooperatives:** cooperatives that buy members' produce for processing at fair prices (often vertically integrated as the last downstream link in marketing cooperatives);
- **Input supply cooperatives:** cooperatives that exploit the benefits of size to purchase inputs (fertilizers, chemicals, fuel, seeds, animal feed, etc.) or specialized services (veterinary medicine, artificial insemination) at prices and terms beneficial to members-producers;
- **Machinery cooperatives** (or machinery pools): pools (fleets) of farm machinery jointly owned by groups of members in situations when it is too expensive or too inefficient for each farmer to purchase machinery independently;
- **Agricultural extension and information management cooperatives:** services to upgrade the human capital of cooperative membership through training, education, knowledge exchange, and management information technologies provided by hired experts.

There are many examples of service cooperatives outside agriculture:

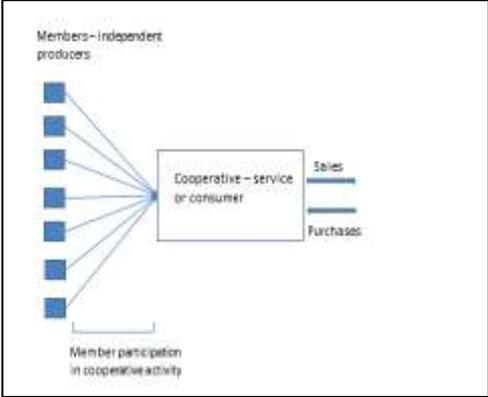
- rural electric power cooperatives,
- renewable energy cooperatives,
- rural telephone cooperatives,
- healthcare cooperatives (the cooperative hires healthcare professionals for the benefit of its members),
- housing cooperatives
- cooperative schools, nurseries, child-care facilities,
- cooperative art galleries (a "marketing cooperative" for art "produced" by member artists)
- credit unions and cooperative banks
- cooperative (mutual) insurance companies
- auditing and accounting cooperatives (usually serving other cooperatives, not individuals)

All these are examples of situations where private entrepreneurs find it unprofitable to enter and provide the basic service, or alternatively the private entrepreneurs enjoy a monopolistic position that leads to exploitation of the consumers. In agriculture and other areas, service cooperatives thus fulfil the important function of correcting for market failure, by stepping in to provide missing services and counteracting monopolistic exploitation by private initiative.

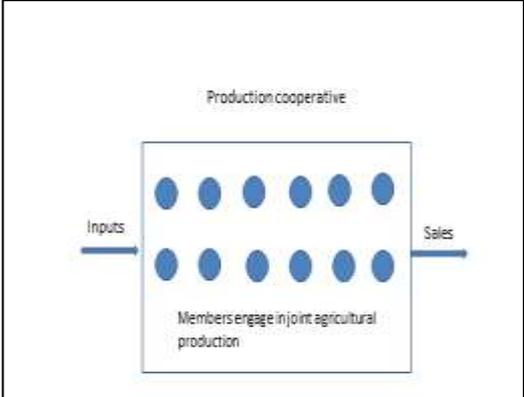
**Consumer cooperatives** in Western nomenclature there are trading firms that sell consumer goods primarily to their members at advantageous prices. They are basically a variety of supply cooperatives (outside agriculture), but they are treated as a separate class because of their numerical importance in the world. The largest segment of consumer cooperatives is cooperative food stores and supermarkets (“grocery stores”), but cooperative stores that sell clothes, housewares, appliances, and even cars to their members – at advantageous prices – also fall in the category of consumer cooperatives. In the West, consumer cooperatives, unlike other service cooperatives, are most likely to deal with non-members (“third parties”) on a regular basis: this is their strategy of achieving growth comparable with other firms in the highly competitive consumer services sector.

**Figures 1 and 2** schematically illustrate the organizational differences between service (or consumer) cooperative and production cooperative. The service cooperative is created by members-producers who retain their legal and operational independence, operating outside the cooperative (**Figure 1**). Two-way relations exist between the members and the cooperative: members may deliver their output to the cooperative for selling to outside customers, and members may acquire from the cooperative inputs and services that the cooperative purchases from outside suppliers. Money flows from the cooperative to members as payment for their deliveries and from members to the cooperative as payment for their purchases. Member participation in the activity of the cooperative (either selling or buying) is typically a precondition of membership, although there is no obligation for the members to sell all their output or purchase all their inputs exclusively through the cooperative.

**Figure 1.** Schema of a service or consumer cooperative



**Figure 2.** Schema of a production cooperative



In a production cooperative, members typically work inside the cooperative, and not as independent entities (**Figure 2**). They engage in joint production using pooled resources (land or machinery); the cooperative sells the jointly produced output in the market and purchases inputs for the joint production process – not for individual members.

**Classification of Cooperatives in Legislation in Central Asia**

The legislative base in all five Central Asian countries includes a variety of laws on cooperatives (**Table 2**), starting with cooperation laws inherited directly from the Soviet system (1991-1992) and ending with latest efforts to adapt the cooperative legislation to

Western principles (the 2005 Kyrgyzstan Law of Cooperatives and the 2013 Tajikistan Law of Cooperatives).

Nevertheless, there is deep-rooted lack of understanding of the exact nature of cooperative in Central Asia and throughout the CIS. Ever since the Soviet time, legislation on cooperation and cooperatives included the standard ICA principles of voluntary membership and democratic control (see above). Although in practice these principles were blatantly abused by the state, there is by now general familiarity with the standard formula of voluntary membership and the goal of maximizing members' benefits from participation in the cooperative. However, there is lack of clarity as to what types of cooperatives exist, how they correspond to the Western typology of cooperatives, and how the newly promoted *service* cooperatives are different from the Soviet-style *production* cooperatives (collective farms).

**Table 2. Cooperative legislation in Central Asia 1991-2013**

	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
1991		Law of Cooperation		Law of Consumer Cooperation	Law of Cooperation (revised 1993-98)
1992			Law of Consumer Cooperation		
1994	Civil Code: Production Coop (articles 96-101)				
1995	Law of Production Cooperatives			Law of Peasant Associations	
1998					Law of Agricultural [Production] Coops (Shirkats)
1999	Law of Rural Consumer Cooperation	Law of Cooperation	Civil Code: Production Coops (articles 118-123); Consumer Coops (article 128)		
2001	Law of Consumer Cooperatives (excluding rural consumer cooperation)				
2002			Law of Production Cooperatives		
2003	Law of Rural Consumer Cooperatives of Water Users ("Water User Association")				
2005		Law of Cooperatives			''
2013			Law of Cooperatives		

Cooperative legislation in Central Asia (which necessarily draws on the corresponding definitions from the Civil Code and has its roots in the 1988 USSR Law on Cooperation) distinguishes between production cooperatives (*proizvodstvennye kooperativy*) and consumer cooperatives (*potrebitel'skie kooperativy*). Unfortunately, the meaning that the existing

legislation imparts to these two familiar-sounding terms is different from the accepted meaning in Western usage. Furthermore, the term “service cooperative” (*servisnyi kooperativ, obsluzhivayushchii kooperativ*) is generally not mentioned in Central Asian legislation: it occurs only once in two versions of the Kyrgyzstan Law of Cooperatives – 1999 and 2005, and the standard range of service functions is apparently entrusted to “consumer cooperatives”.<sup>2</sup>

The so-called “consumer” cooperatives appear to be functionally the closest to the Western notion of service cooperative. Their functions, according to the 2001 Kazakhstan Law of Consumer Cooperatives, include marketing, input supply, processing, and other service activities. The Kyrgyzstan Law of Cooperatives (in its 1999 and 2005 version) contains a rare mention of the term “service cooperative” with an explicit list of its functions: marketing, storage, and packing of farm products, veterinary services, fertilizer application, plant protection, construction, transport, extension services, and more. On the other hand, the 2013 Tajikistan Law of Cooperatives does not elaborate the specific functions of either consumer or service cooperatives, simply stating in very general terms that cooperatives may engage in all legal activities involving production and provision of various services (including consumer services). This non-specific attitude toward consumer cooperatives in Tajikistan legislation may be regarded as a carryover from the 1999 Tajikistan Civil Code, which devotes a long article to consumer cooperatives but only says that their function is “to satisfy the material needs of members”.

“Production” cooperatives receive very vague definition in Central Asian legislation. They are typically characterized as engaging in “joint production and other activities”. The 2005 Kyrgyzstan Law of Cooperatives includes a very terse and simple definition of a production cooperative as engaging in joint production, without mentioning anything about services. The 2013 Tajikistan Law of Cooperatives does not devote special place to production cooperatives (despite their prominence in the Civil Code), merely stating that cooperatives may engage in production alongside a range of other activities. The 1999 Tajikistan Civil Code elaborates the “other activities” by listing processing, marketing, contract work, trade, and consumer services, so that a production cooperative emerges as a mix of the Western notions of production cooperative and service cooperative. Continuing the established Soviet tradition, production cooperatives in Central Asia and all of CIS use the pooled land and assets of the members for joint production (like a collective farm) and provide marketing and supply services to the joint production process, not to its members: the production cooperatives sell the jointly produced output to third parties (a marketing service) and provide supply services (e.g., purchase of farm inputs, provision of farm machinery) to the joint production process, not to individual members. In this respect, production cooperatives in Central Asia are similar to production cooperatives in the West (to the extent that such exist), but in addition to supporting joint production, production cooperatives in CIS also supply services to members that are intended for the members’ subsistence-oriented household plots and are by-products

---

<sup>2</sup> The issue of proper classification becomes even more difficult when we notice that in addition to “laws of cooperatives” the Central Asian countries also have so-called “laws of cooperation” or “laws of consumer cooperation”, which were passed in 1991-1992 based on Soviet concepts of cooperation. These “laws of consumer cooperation” deal with so-called “rural consumer societies” – part of a centrally imposed state-run system (formerly known as *Tsentrosoyuz* in the Soviet Union) whose function was to supply consumer goods to the rural population and sell the output produced on household plots. The administrators of the “consumer cooperation system” remain a powerful lobby to this day and the system, although hardly functioning, is so entrenched in former Soviet countries that Tajikistan, for instance, had to retain the 1992 Law of Consumer Cooperation in its statutes in parallel with the new 2013 Law of Cooperatives.

of the cooperative’s collective production activity. This appears to be a unique feature of production cooperatives in the CIS, as Western production cooperatives carefully disassociate their primary business activities (joint production) from the individual farming activities of their members. The two levels of service provision in production cooperatives in Central Asia – services for joint production and services to members’ household plots – strengthen the impression these are essentially a mix of production and service cooperative.

It seems that the legal distinction between production and consumer cooperatives in Central Asian legislation is not based on functional attributes (i.e. what the cooperatives do). Instead, cooperatives are classified based on formal business-related attributes (**Table 3**), such as profit-making behavior (“commercial”, i.e., “for profit” organizations and “non-commercial”, i.e., “not for profit” organizations), clientele orientation (sales to members or non-members), and composition of the labor force (members work or do not work in the cooperative). Unfortunately, these formal attributes are ambiguous and fuzzy for cooperatives, and thus do not allow cooperatives to be classified into two disjoint groups.

**Table 3. Classification of cooperatives in Central Asian legislation**

<b>Production cooperative</b>	<b>Consumer cooperative</b>
Legal body	Legal body
Commercial (“for profit”) organization	Non-commercial (“not-for-profit”) organization
Sales to third parties only	Sales mostly to members
Members part of the labor force	Members not necessarily part of the labor force

First, the notion of profit in a cooperative is vague and unclear. Some international authorities argue that *all* cooperatives are essentially not-for-profit, because their goal is to maximize the members’ benefits by lowering the prices that they charge and raising the prices that they pay. Profits are reduced to zero (or almost zero) by this pricing policy.<sup>3</sup> Furthermore, there is no reason to assume a difference in profit orientation between the two groups of production and consumer cooperatives: under the current Law on Consumer Cooperation in Tajikistan (1991) consumer cooperatives include retail and wholesale traders, providers of food and other services, traders in consumer goods, etc., which in principle are not less profit-making than other cooperatives. The attributes of “for-profit” (commercial) and “not-for-profit” (non-commercial) are too ambiguous to be used as classification attributes for cooperatives and should be removed from future legislation.

**Table 4. Functions of “production cooperative” as defined in the 1999 Civil Code of Tajikistan (Art. 188) and their classification according to Western views of production, service, and consumer cooperatives**

Functions of “production cooperative” according to Civil Code of Tajikistan (Art. 118)	Western classification
Production	Production cooperative
Processing	Service cooperative
Sale of products	Service cooperative
Contract jobs, custom work	Service cooperative
Trade	<i>Depends on specifics</i>
<i>For and with producers</i>	Service cooperative
<i>For and with consumers</i>	Consumer cooperative
Consumer goods and services	Consumer cooperative
Other services	<i>Depends on specifics</i>
<i>Services to producers</i>	Service cooperative
<i>Services to consumers, general population</i>	Consumer cooperative

<sup>3</sup> The Civil Code of Switzerland (OR Art. 828) specifically defines all cooperatives as not-for-profit. This was noted by H.-H. Muenkner in materials prepared for the discussion of the draft Law of Cooperatives in Tajikistan (September-November 2011)

Second, there are also difficulties with the sales clientele attribute (“production cooperatives” selling mainly to third parties versus “consumer cooperatives” selling mainly to members). Production cooperatives in the sense of cooperatives in which members produce goods or services indeed sell their output to outsiders, i.e., third parties. But this is the Western definition of production cooperative, whereas in Tajikistan legislation (Civil Code, Article 118) production cooperatives also engage in processing and sale of agricultural products, contract work (e.g., ploughing or harvesting), trade, provision of services, and other activities that do not involve production – activities that mainly target members – not third parties – as the sales clientele. In Western nomenclature these cooperatives are called *service cooperatives*, not production cooperatives (**Table 4**), and they are definitely member-oriented in their sales, whereas the Civil Code of Tajikistan puts them in the category of production cooperatives that are supposed to sell to third parties only. Finally, consumer cooperatives in the sense of food and other retail traders (as defined in the West) indeed sell to members, but the proportion of non-member sales in these cooperatives is steadily growing and according to Tajikistan legislation eventually they will have to be transformed into production cooperatives – although they do not engage in any production. These terminological inconsistencies suggest that the feature of selling to third parties vs. selling to members should also be dropped as a classification attribute for cooperatives.

### ***Need for Consistent Definitions***

The terms “production cooperative” and “consumer cooperative” as used in Central Asian legislation are inconsistent with the accepted Western terminology. A consistent set of definitions of service, consumer, and production cooperatives should be introduced into legislation, based on functional features (including appropriate amendments in the Civil Code).

Clear unambiguous definition of different types of cooperatives – production, service, and consumer – is essential to ensure acceptance of the concept of cooperatives by the rural population. In market economies, the term “cooperative” is automatically interpreted as a service cooperative. In Central Asia, as in all CIS countries, the term “cooperative” is still automatically understood as a production cooperative – the model of a former *kolkhoz* or collective farm. Having been exposed for decades to the negative experience with such “production cooperatives”, rural people may persist in their negative view of the whole concept of cooperatives and reject any proposals to form cooperatives, even when the intention is to create service cooperatives, not old-style production cooperatives (Plunkett Foundation, 1995). The new legislative framework must acknowledge this psychological barrier to cooperatives by introducing unambiguous definitions that will prevent any possibility of misunderstanding or misinterpreting the strategic intentions.

A special public awareness campaign should be organized to explain what cooperatives are in market economies, how they function, and what benefits farmers derive from membership. The educational effort should make it abundantly clear that service cooperatives are intended to improve smallholders’ access to services, thus overcoming many of the difficulties associated with small farm sizes while allowing each member to maintain their independence as a producer. Service cooperatives are not intended to overcome the problem of land fragmentation by merging small farms into larger production units: this is the role of *production* cooperatives, which are very rare in market economies, largely due to their lower

efficiency compared with individual and family farms. The public awareness campaign should be carried out by a special cooperative information service to be established by the government with donor support. This should be a permanent system that will continue providing information to farmers and cooperatives over the long term, and not only during the creation and setup phase. The system can be modelled on existing cooperative information services in the U.S., the Netherland, and other developed countries.

### 3. Taxation of Cooperatives

Service cooperatives have the potential to increase the benefits to members by exercising their market power and negotiating better prices and improved terms both for sale of member products and for delivery of services. Yet tax distortions may negate these positive effects and make membership in a cooperative an ineffective proposition for farmers. Tax issues must be carefully addressed and resolved if cooperatives are to have any chance of developing in Central Asia.

Farmers join cooperatives with the objective of getting higher prices for their products and paying lower prices for the inputs and services they buy. The cooperative model achieves these objectives in two ways.

First, a cooperative represents many farmers in the market and thus enjoys greater market power than each small farmer individually. The cooperative can negotiate lower prices for wholesale bulk purchases of inputs and pressure traders into paying higher prices for guaranteed deliveries of high-quality products.

Second, the cooperative does not aim to maximize its profits: in fact it distributes all its profits to members in proportion to their participation in cooperative activities, thus increasing members' revenues and reducing their costs compared to what they could achieve by dealing with private profit-maximizing intermediaries.

These two mechanisms usually guarantee that cooperative members fare better than smallholder farmers selling and buying independently. In principle this provides an incentive for joining a cooperative, but there is a danger that taxation of cooperatives may negate the membership benefits and discourage farmers from becoming members. A cooperative is a legal body and three types of taxes may negatively affect the benefits that members receive from their cooperative:

- **VAT** on transactions between the cooperative and its members
- **Retail sales tax** on transactions between the cooperative and its members
- **Tax on accounting profits** reported by the cooperative

The social tax is often mentioned as a serious problem for rural people, but this tax is paid by everybody – farmers and cooperatives alike – and is not activity-based. It is therefore not relevant for the present discussion. The Law of Cooperatives and, more importantly, the Tax Code, should address the three types of taxes in the following way.

#### ***Exemption from Value Added Tax***

Peasant farmers pay VAT on their purchases from suppliers. The cooperative also pays VAT to suppliers, but then the cooperative has to charge VAT on its sales to members. As a result, members may end up paying to the cooperative more than what they would have paid independently to a supplier. To avoid negative effects of VAT on the relations between cooperatives and their members, all transactions with members – supply, provision of services, contract work – should be exempt from VAT. In addition to a provision in the

national cooperative law, an appropriate amendment has to be added to the national tax codes. This is the only way to ensure that the provision is respected in practice by tax inspectors. The recommended approach to VAT exemption of cooperative transactions with members is an excellent example of the principle of “fiscal transparency” applied to cooperatives in the Netherlands. In this country, with its outstanding tradition of cooperation in agriculture and other sectors, transactions between members and their cooperative are exempt from all taxes, not only VAT. This gives recognition to the “not-for-profit” status of cooperatives and makes the entire surplus available for distribution to members, without subjecting it to taxes on profit.

### ***Exemption from Retail Sales Tax***

Retail sales tax is common in Central Asian countries and the rest of CIS. Household plots are exempt from this tax by definition, whereas peasant farms, although legally liable, usually manage to avoid retail sales tax on their direct sales to consumers in the market. Avoidance becomes impossible when peasant farms (or even household plots) sell to legal bodies, such as processors or, in the future, marketing cooperatives: in such cases, the legal body pays the retail sales tax and passes this tax as an additional charge to members. However, sales to a processor or a marketing cooperative are in principle not retail sales: these are wholesale transactions and should be exempt from the retail sales tax. Yet, in reality, tax authorities enforce collection of retail sales tax also on wholesale transactions with processors. This issue must be resolved, as payment of retail sales tax on transactions with marketing cooperatives will place cooperative members (whether peasant farms or household plots) at a distinct disadvantage compared to non-members.

It will also be necessary to exempt cooperatives from any retail sales tax on inputs delivered to members: this will have to be resolved in the spirit of “fiscal transparency” as in the VAT exemption amendment. Transactions between members and the cooperative – whether sale of products by members to the cooperative or sale of inputs by the cooperative to members – should not be subject to retail sales tax. This principle should be officially recognized and included in formal instructions to tax inspectors at all levels.

### ***Exemption of Distributions to Members from Profit Tax***

Although in principle cooperatives are non-profit organizations, their financial reports may show an accounting profit at the level of revenues and expenses (called “surplus” in cooperative accounting). This accounting profit is created because the cooperative may have initially underpaid its members for products delivered (expenses too low) or overcharged them for inputs supplied (revenues too high). In effect the accounting profit is the result of internal pricing decisions within the cooperative, and not profit in the usual economic sense of the term.

As an example, let us consider the relations between member-farmers and their marketing service cooperative. Members produce independently on their plots and deliver their products (milk, vegetables, honey) to the cooperative. The members do not deal with retail sales to consumers: this function is entrusted to the marketing cooperative. Receiving the products from its members, the cooperative makes the first payment to members calculated on the basis of estimated market or near-market prices. This first-wave payment to members is an advance

on account of products received: the final accounting is made at the end of a quarter or a year, when the cooperative prepares its financial report. If the financial report shows an accounting profit (“surplus” in Western cooperative terminology) after deducting the first-wave payments to the members and other operating expenses incurred by the cooperative during the period, this essentially indicates that the cooperative underpaid the members for the products delivered during the reporting period. The surplus in principle should be distributed as a second payment to the members in proportion to their deliveries to the cooperative. In the end, the members may receive from the cooperative a price higher than the market price that they would have received by selling independently to the consumers. If the financial report shows an accounting loss (i.e., “deficit” or negative “surplus”), this indicates that the cooperative overpaid the members for the products delivered during the reporting period. The deficit is also distributed to the members in proportion to their deliveries and is recorded as a debit entry in the accounts of each member, to be covered from next year sales or special funds maintained by the cooperative.

The same considerations exactly apply to the relations between members and a supply cooperative, which purchases inputs (fertilizers, seeds, feed, etc.) from suppliers at wholesale prices and re-sells them to members. Members initially pay an advance to the cooperative to cover the estimated cost of the inputs (first-wave payments). If the financial report at the end of the period shows positive “surplus” (accounting profit), this means that the cooperative initially overcharged the members for the inputs and the “surplus” is distributed to the members in proportion to their purchases through the cooperative. This effectively lowers the end price that members pay to the cooperative for inputs. If the financial report shows a “deficit” (accounting loss), this means that the cooperative initially undercharged the members for their purchases and the “deficit” is also allocated to members in proportion to their purchases. A similar scheme is applied in other service cooperatives, including cooperatives that provide machinery services to members using a jointly owned pool of farm machines.

**Table 5. Schematic “profit and loss” statement of a cooperative**

<b>Marketing cooperative</b>	<b>Supply cooperative</b>
Revenues from sale of members’ products to third parties	Revenues: first-wave payments from members
Costs:	Costs:
First-wave payments to members	Paid to suppliers
Operating costs of the cooperative	Operating costs of the cooperative
Gross income (surplus/deficit)	Gross income (surplus/deficit)

Cooperatives do not know in advance, at the time of the actual transaction, how much to pay to members for product deliveries and how much to charge for input supplies and other services. Financial settlements with members are handled in two waves: the first-wave payments and charges are in the nature of an initial advance, and the final settlement is made at the end of the period, when the financial statements have been prepared. As a result, a service cooperative usually presents a financial statement that shows a positive surplus (accounting profit) or a deficit (accounting loss) according to the scheme in **Table 5**. Gross income (доход in Russian) represents the surplus or deficit that is further allocated by three channels:

- 1) Allocation to the cooperative reserve fund or other capital funds (“retention of earnings” in standard accounting terminology).

- 2) Distribution to members in proportion to their share contribution to the cooperative capital (“dividends” in standard Western terminology; паевые выплаты in Russian).
- 3) Patronage refunds (кооперативные выплаты) in proportion to the members’ use of cooperative services (i.e., basically in proportion to first-wave payments to the members).

The sum of the three amounts distributed to members is equal to gross income. Patronage refunds are determined as the difference between gross income and the first two allocations (Table 6).

**Table 6. Allocation of profit in a service cooperative**

Gross income:
Less allocation to reserve fund and other funds
Less distribution in proportion to share contribution (паевые выплаты, ”dividends”)
Difference available for distribution as patronage refunds (кооперативные выплаты)

Conventional interpretation of the tax code will require the cooperative to pay tax on the full gross income at applicable rates. Recognition of the special nature of patronage refunds in cooperatives (as second-wave adjustment of initial over- or under-payment to members) and the Dutch principle of “fiscal transparency” suggest that this component of gross income should not be taxable. Furthermore, the U.S. tax code recognizes “dividends” paid to members in agricultural cooperatives (but not other cooperatives) as non-taxable at the cooperative level, i.e., exempt from withholding taxes (Autry and Hall, 2009). If the Dutch and the U.S. tax principles are adopted, the cooperative will be required to pay tax only on the share of gross income retained in reserve fund and other capital funds. The amount retained in the reserve fund and other capital funds will be shown net after deduction of the appropriate taxes.

Recognizing the need to exempt patronage refunds (кооперативные выплаты) from taxation, the 2013 Law of Cooperatives in Tajikistan introduced an important provision in Art. 36(3):

Payments to cooperative members in accordance with their participation in cooperative activities and payment of bonuses/honoraria to cooperative managers are treated as expenses.	Выплаты членам кооператива в соответствии с их участием в хозяйственной деятельности кооператива и выплаты вознаграждений должностным лицам кооператива относятся к расходам кооператива
--	--

The explicit wording in the Law of Cooperatives is particularly important for achieving the desired effect as the 2005 Law of Cooperatives in Kyrgyzstan, for instance, contains a blanket statement deferring all tax-related decisions in cooperatives to the Tax Code (Article 32). The 2009 Tax Code of Kyrgyzstan indeed exempts agricultural service cooperatives from VAT on transactions with members (Article 239) and from retail sales tax (Article 259). It also exempts from taxation the profit of agricultural service cooperatives (Article 212), thus guaranteeing a special status for patronage refunds. Yet expert opinions in Kyrgyzstan indicate that these provisions are not observed in their entirety by tax inspectors, perhaps because they are relatively new and unfamiliar (the relevant version of the Tax Code was adopted in July 2009).

The provision concerning exemption of patronage refunds from profit tax in Tajikistan, in addition to the proposed VAT and retail sales tax amendments, is a very important step toward establishing “fiscal transparency” for cooperatives. To be effective, this provision

must be incorporated as an amendment in the Tax Code (following the example of Kyrgyzstan): expert opinions suggest that tax authorities in Tajikistan (and probably also in other countries in Central Asia) refuse to follow provisions in specific laws unless they are also reflected in the Tax Code and the courts are reluctant to rule against the tax authorities in such instances. We furthermore recommend following the U.S. practice and exempt share payments (паевые выплаты) from taxation in agricultural service cooperatives.

## 4. Observations from the Field: Cooperatives in Tajikistan and Kyrgyzstan

Agricultural development strategies in both Tajikistan and Kyrgyzstan emphasize the development of service cooperatives as one of the priorities (Tajikistan Strategy, 2011; Kyrgyzstan Strategy, 2012). This obviously strengthens the need for precise and consistent definitions of different types of cooperatives in national legislation and emphasizes the urgency of resolving the taxation issues. This section describes the cooperative scene in Tajikistan and Kyrgyzstan as it emerges from recent field visits and interviews.

### *Fledgling Service Cooperatives in Tajikistan*<sup>4</sup>

Several donor organizations work actively on the establishment of agricultural service cooperatives in Tajikistan. These include Acted, OSCE, GIZ/TAFF, and the Aga Khan Foundation. Unfortunately donor experiences and monitoring efforts have not been documented (with the possible exception of the GIZ/TAFF TAG groups) and it is very difficult to analyze the actual achievements of these efforts so far. It is even impossible to map the existing donor-established cooperatives across Tajikistan to get a sense of spread and coverage.

Visits to northern Tajikistan (Khatlon, Sughd, and Rasht provinces) have revealed the existence of authentic service cooperatives created bottom-up by groups of local farmers.

- One example is an apricot-drying cooperative (registered as a consumer cooperative) with a membership of 20 independent apricot growers, which operates jointly owned apricot-drying and almond-extracting equipment. It bags and sells dried apricots and almonds extracted from apricot pits, actively looking for trade outlets and export opportunities. In addition to marketing activities, it also supplies fertilizer to its members. It is officially registered as a consumer cooperative.
- Another example is a machinery pool with several pieces of farm machinery that provides mechanized field services to its members and also to non-members (charging 30% higher prices). The machinery coop also sells fertilizer and fuel to members, charging a mere 2% markup. In an attempt to ensure sustainability, the cooperative has applied for land to develop an apricot orchard: its strategy thus includes diversifying into production activities as a mixed service/production cooperative, which highlights the prevailing confusion between different types of cooperatives.
- A vivid illustration of the bottom-up approach is provided by the “interest group” of some 20 small peasant farmers in Rasht Province, each with 1-2 hectares of land, who organized (with assistance from the Aga Khan Foundation) to overcome the bottleneck with access to quality seed potatoes and to renovate an existing potato storage facility. The “interest group” initially did not register as a coop, because

---

<sup>4</sup> This section is based on impressions from field visits in northern Tajikistan organized by FAO-TJ in March 2012.

members decided to accumulate some experience before applying to the Ministry of Justice for formal registration.

The cooperatives interviewed in northern Tajikistan are typically managed by former collective-farm specialists (agronomists or livestock professionals) identified by the donor organizations. These specialists capitalize on their professional experience by providing agricultural extension and advisory services to local farmers (both members and non-members) through donor-sponsored networks or associations.

A different example of village-level cooperative activities in Tajikistan is provided by livestock herding as practiced everywhere across the country: animals are collected from the village households and taken to pasture every morning by a herder (*chaban*), who is typically one of the village residents with cattle. The responsibility for the day's herding rotates among the families in the village. This cooperative organization relieves the individual farmers from routine responsibility for herding their animals, just as produce collection by a marketing cooperative relieves them from the responsibility of travelling to the town market. Yet the cooperative grazing scheme in itself does not prevent unsustainable use of the common pastures where the animals graze. This second objective was achieved in an inventive way through the establishment of livestock committees ("associations") in Muminabad (a district in the east-central part of Khatlon Province). The local livestock committee is responsible for dividing the common pasture into ten fenced segments and establishing a grazing rota, so that on any given day animals graze on one segment, while the other segments are allowed to rest and recover (the rotation cycle is 5-7 days on each segment). The livestock "cooperative" does not own any cattle – the animals remain in the ownership of the village households. Yet the cooperative's pasture planning activities provide an important service to the members by promoting sustainable pasture management and preserving pasture quality in the long run.<sup>5</sup> In addition to rotational grazing, the association used cooperative funds to establish watering points and shelter for the animals, as well as initiate alfalfa seeding to improve the nitrogen content of the pasture soil.

The cooperatives in Tajikistan are fledgling efforts which are badly in need of training and guidance. The general feeling is that cooperatives, once launched fairly effectively with donor assistance, are left pretty much on their own, without follow-up assistance, monitoring, and guidance. Cooperative managers naturally complain of difficulties with purchasing machinery or raising credit, but beyond that it is clear that they are untrained and without experiencing in managing a service cooperative. All cooperatives have formal business plans, but managers need training and guidance on how to implement the plans and how to work toward achieving their strategic objectives. Training and learning programs are needed for existing and potential cooperative managers (and also members).

The field impressions in Tajikistan can be summarized as follows:

- the new cooperatives in Tajikistan are voluntary grass-roots initiatives, created with initial donor guidance and financial support;
- they mainly engage in delivery of services, not joint production;
- they are often informal and created in a sporadic manner;
- they are characterized by small scale and limited scope of operations.

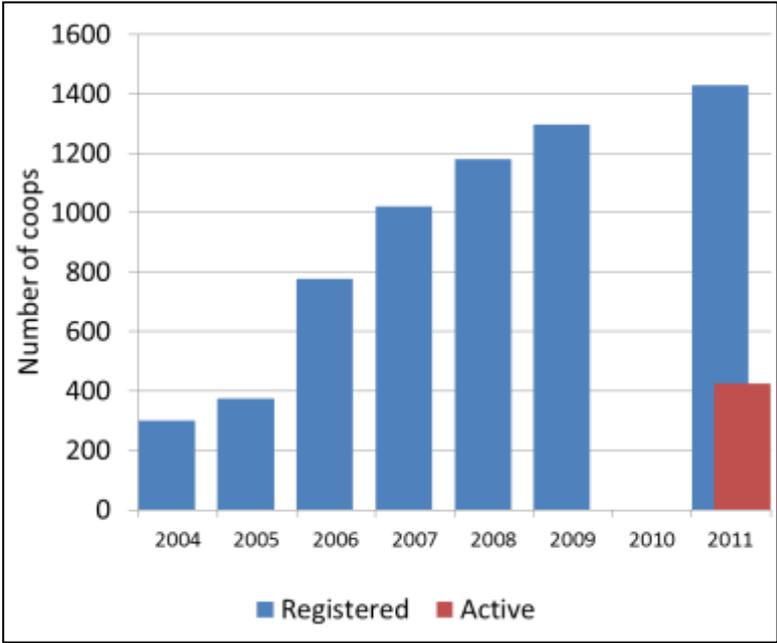
---

<sup>5</sup> The livestock associations were initiated by a project of Caritas Switzerland, which has since ended. There is no evidence that, despite its promise, the original rotational grazing scheme has been adopted in other parts of Tajikistan. For more information see WOCAT (2010a, 2010b).

All these features place the new cooperatives in Tajikistan in stark contrast to all-pervasive mandatory cooperation of the socialist era.

### **Dominance of Production Cooperatives in Kyrgyzstan<sup>6</sup>**

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). MoA reports the number of *registered* cooperatives, which showed impressive growth over time, rising from about 300 in 2004 to 1,300 in 2009 (**Figure 3**).<sup>7</sup> NSC, on the other hand, based its reporting on the number of *active* (operating) cooperatives. The gap between the two sources is dramatic (**Figure 3**): in 2011, MoA 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.



**Figure 3.** Development of cooperatives in Kyrgyzstan 2004-2011. Blue bars: registered cooperatives from MoA; red bar: active cooperatives from National Statistics Committee (Kyrgyzstan in Numbers, 2012).

The dominant majority of registered cooperatives in MoA 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.

<sup>6</sup> This section 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.

<sup>7</sup> 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 (FAO/REU survey, 2012). The survey focused on 400 active cooperatives in the NSC database. The original objective was to survey a sample of 100 cooperatives, 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 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 sample, which additionally included 37 production cooperatives for a total of 57 respondents. In addition to cooperatives, the survey also covered 1,000 peasant farmers randomly selected across the country. These respondents provided insights on the relations between users and cooperatives.

Judging by their asset base and activity profile, 52 of the 57 cooperatives in the sample 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. The land endowment was very large, averaging 7,000 hectares in the sample. 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 painstakingly 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). In addition to primary production, all cooperatives reported providing services to both members and non-members. As explained in the discussion of cooperative organization, provision of services to members and non-members is a typical feature of production cooperatives and does not necessarily identify the cooperative as a service cooperative. 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).

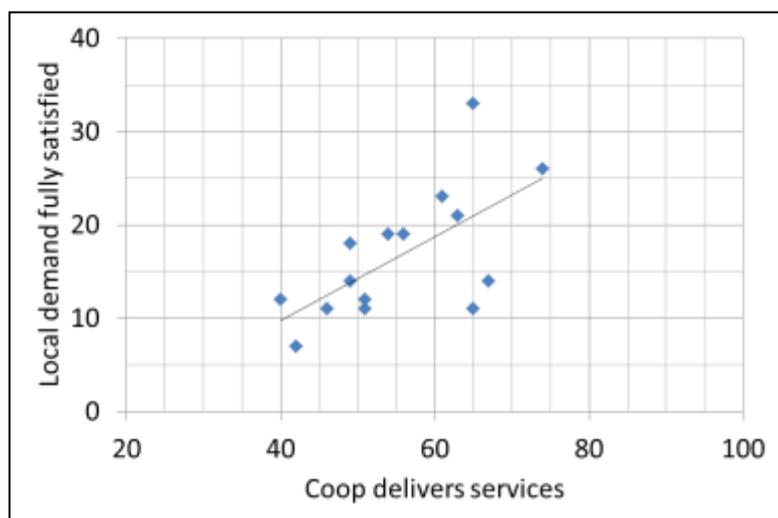
**Table 7** shows the percent of cooperatives in the sample that provide various services to their members and non-members. The frequency of services to members is substantially higher than the frequency of services to non-members (46% compared with 17% averaged over 14 service categories). The main 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.

**Table 7. 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
<i>Average</i>	46	17

Source: FAO/REU survey (2012).



**Figure 4.** Local service sufficiency increases with the percent of cooperatives that deliver the service.

Source: FAO/REU survey (2012).

A direct indication of the positive role that cooperatives play in rural life is provided by the results shown in **Figure 4**. 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 4** 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.

### *Taxation and financial performance*

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), which indicates that the tax code provisions explicitly exempting cooperatives from these taxes (see above) are generally observed.

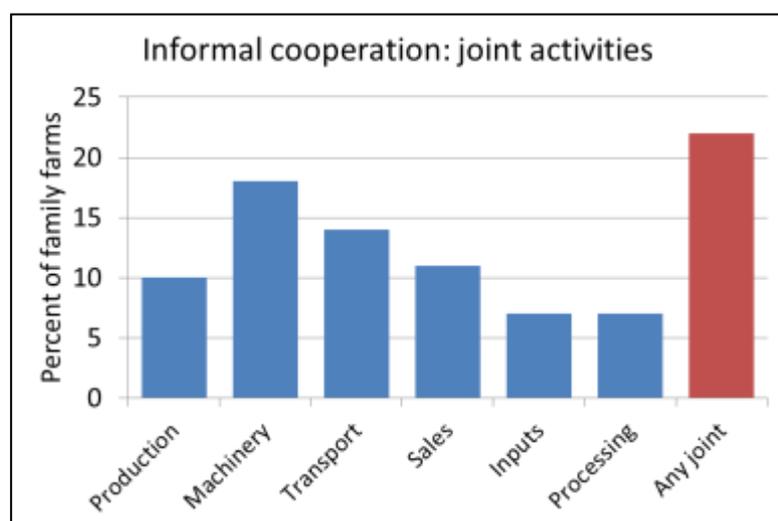
Taxes do not appear to be a major burden for cooperatives, as less than 10% listed reduction of taxes among the demands for support from the government. The main areas in which tax

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*

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 5**). Joint use of farm machinery and transport facilities is the most common, reported by 17% and 14% of respondents respectively. 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.

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.



**Figure 5.** Informal cooperation in various activities among family farms.

Source: FAO/REU survey (2012).

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 8**). 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.

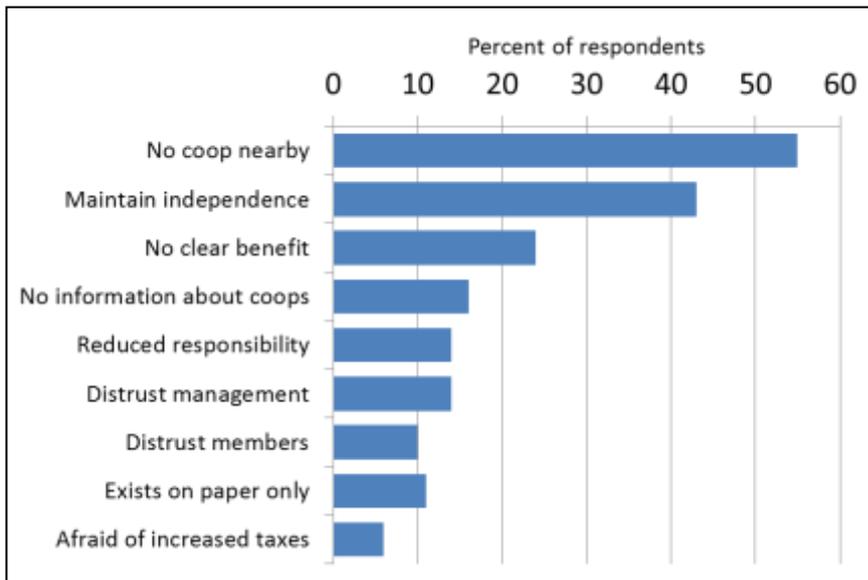
**Table 8. Participation of cooperative members in various services and activities (percent of respondents)**

Area of cooperation	All coop members (n=78)	Members who participate in joint production (n=34)	Members who do not participate in joint production (n=44)	Satisfaction rating among those using the 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
Ag 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.

The large 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 6**). The second most frequently cited reason is that the respondents wish to preserve their independence (42%), which probably reflects the ingrained influence of Soviet-style production cooperatives. 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 strengthens our contention that cooperative development requires a large-scale information campaign to familiarize the rural population with the workings 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 members toward taxation (see above).



**Figure 6.** Reasons for not becoming a cooperative member.

Source: FAO/REU survey (2012).

## **5. Cooperative Development Policy for Central Asia**

### ***World Practice and Central Asia***

In developed countries, the basic cooperative principle of voluntary membership has a broader meaning than simply the right of voluntary entry into an existing cooperative. This principle essentially signifies also voluntary creation of new cooperatives by groups of individuals with common interests and objectives. Cooperatives are created “bottom-up”, driven by the voluntary initiative of the users, and not “top-down”, according to formal cooperative development programs advocated by state organs. The Western approach to cooperative development is radically different from the approach observed in Kyrgyzstan, Tajikistan, and other Central Asian countries, where the government has a significant role in the “development of the cooperative movement” through central dictates and formal strategy documents. Furthermore, cooperative development strategies in Central Asia consistently advocate the creation of production cooperative as a cure to the fragmentation of land holdings; they put much less emphasis on the creation of service cooperatives as a means for improving market access for small farmers. The world experience clearly shows that cooperatives created “top-down” according to government programs seldom survive, and only cooperatives created “bottom-up” based on user initiative in rural areas have a chance of proving to be viable.

The Western “bottom-up” approach to the creation of cooperative effectively limits the role of the government in this process. The government’s role is essentially restricted to organizing a broad information campaign in rural areas with the objective of acquainting the rural population with the advantages and benefits of membership in a service cooperative. Such an information campaign is necessary to neutralize the negative experience of the rural population with Soviet-period cooperatives and to clearly delineate the differences of Western, market-style service cooperatives from the production cooperatives in centrally planned economies. The information campaign should be reinforced by the development of information packages and materials intended for cooperative members and managers, including personnel training and education programs. A useful example of an information package for potential cooperators is a basic start-up guide on agricultural cooperatives developed by Agriculture Canada (processed).

The main responsibility for the organization of the information campaign, personnel training, and preparation of information materials rests with the government and appropriate public institutions (such as the national union of agricultural cooperatives in each country). International donors should support the government in this endeavor through their technical assistance and rural development programs. The USDA cooperative service in the U.S. (USDA, 2013), the Canadian Co-operative Association, and similar undertakings in the Netherlands (e.g., National Cooperative Council for Agriculture and Horticulture) and other developed countries provide a good model for Central Asia.

Local government organs in rural areas should play a leading role in the proposed information campaign and in dissemination of cooperative principles among the population. These local organs should act at the village level as a conduit for disseminating the basic information received from the center and for motivating and encouraging the rural people through appropriate teaching and training to create service cooperatives by their own local forces.

They should also stimulate exchange of information and experience between functioning cooperatives in the region. Together with district and provincial authorities, they can also contribute to the development of close relationships between local cooperatives and processors, exploiting the natural symbiosis between these organizations: cooperatives are suppliers of raw materials for processors, and the sale of farm products by processors is in turn a guarantee of viability for cooperatives. The envisaged role for local government organs requires allocation of adequate budgets and preparation of local cadres qualified to deal with the relevant tasks.

Cooperative development efforts envisage the following role for government and international donors:

- Providing general policy guidance and policy advice regarding the advantages and disadvantages of cooperatives, especially aiming to steer the policy makers from the idea of re-establishing large collective farms in the guise of production cooperatives
- Providing instruction materials and specific technical advice on organization and functioning of cooperatives
- Re-drafting the law of cooperatives and the civil code based on a combination of economic and legal considerations, with advice provided by experts from both fields.

In addition to information and training, cooperative development may require certain financial support, including start-up funds for the purchase of machinery and equipment, and also access to credit. The government and international donors should develop appropriate programs, including partial participation in machinery purchase through distribution of grants, leasing systems, and access to discretionary credits for investments and working capital. All these programs should be conditional on the ability of the cooperatives to generate own funds for partial financing of their requirements. Government and donor programs must not support deeply unprofitable or inactive cooperatives: grants and subsidies should be made available to healthy, fundamentally viable cooperatives, which ultimately will have sufficient own funds to finance their business activity, but which require temporary assistance to achieve sustainability.

Strict targeting and monitoring of government financial support is essential. Previous efforts to provide start-up funds and discretionary credits for the development of cooperatives in Kyrgyzstan during President Bakiev's tenure (2008) have failed: their only effect was to create an artificial increase in the number of registered cooperatives willing to accept government money, without any noticeable impact on agricultural production or rural wellbeing (Beyshenaly and Namazova, 2012). They furthermore gave rise to corruption, as enterprising farmers tried to secure government funds by less than legitimate means.

Government support funds are used in the West to help new cooperatives: USDA (2013) gives a long list of support instruments available to qualifying cooperatives. It is certainly possible to institute similar financial support instruments in Central Asia, but this requires a radical change in the attitude of government officials: distribution of support must be totally impartial and objective. Support should go to cooperatives that have proved their ability to function, cooperatives that are capable of providing matching funds of their own, and cooperatives that can present credible business plans for development. Government funds should not be granted from considerations of political or personal favoritism. As long as conditions in government circles are not ripe for such impartial and objective distribution of

financial support, it is better to have governments concentrate entirely on information, teaching, and training of potential cooperators.

### ***Promoting Cooperatives: Information Campaign and Legal Framework for Cooperatives***

Efforts to promote the development of service cooperatives naturally require a proper legal framework. The national cooperative laws, as well as the civil codes, should clearly and unambiguously define the three main types of cooperatives that exist in market economies:

- Service cooperatives
- Consumer cooperatives (a variant of service cooperatives)
- Production cooperatives

The classification should be based primarily on functional characteristics (what the different cooperatives do) and should disassociate itself from the inherited Soviet-era classification (as reflected in the legacy of the so-called consumer cooperation system). Legal experts working on cooperative legislation issues in Central Asia should study the example of Kyrgyzstan's Civil Code, where the 1999 amendments reduced the discussion of cooperatives to the bare legal minimum (a cooperative is a legal body that may be either a commercial or a non-commercial organization) and left all the functional and organizational details to the law of cooperatives.

In Central Asia, as in all CIS countries, the notion of cooperative automatically raises the connotation of a "production cooperative" or the collective farm that enjoyed such an unfavorable reputation during the Soviet era. The agricultural reform strategies aim at establishing a different type of cooperatives – service cooperatives, whose function is to provide farm services without in any way depriving farmers of independence in all production activities. The implementation of the strategy to encourage the development of service cooperatives should therefore start with a broad information campaign in rural areas, intended to explain the new notion of cooperative and to elaborate on the advantages of becoming a member. This information campaign is basically the responsibility of the government, but donors should naturally be invited to utilize their experience with the establishment of cooperatives and help with funding.

Beyond initial training and learning, it is necessary to establish permanent information services for members and managers. These information services should focus on the following areas:

- Market information
- Relations with banks
- Taxation
- Legal issues

The USDA Cooperative Service in the U.S. (USDA, 2013) and similar cooperative services in Canada, the Netherlands and other EU countries are good models for the establishment of permanent cooperative services in Central Asia.

As part of information and training services, it is necessary to establish mechanisms for systematic experience sharing among existing cooperatives. A successful cooperative is an

excellent example that should be followed by other existing or potential cooperatives – but this example should be advertised through experience sharing among others. The feeling from field visits in Tajikistan is that today the existing cooperatives operate largely on their own, without joining their forces with neighbouring cooperatives (as is inherent in all cooperative systems in the world). One example is a dried-apricot marketing cooperative in northern Tajikistan (Sughd), which had to refuse a large export order because it did not have enough capacity to deliver the required volume. Curiously, the cooperative manager did not think it feasible to connect with one or two neighbouring cooperatives to make up the missing volume. Experience-sharing efforts should also emphasize the advantages of joining forces among cooperatives.

In addition to information support and human-capital development, fledgling cooperatives may require assistance with physical capital, including machinery, equipment, and access to credit. Programs should be put in place to provide seed money for the establishment of new cooperatives. In this context the Acted model in Tajikistan appears particularly promising: cooperatives paid from their own funds about one-third of the value of equipment provided by Acted, and the remaining two-third were a grant from the donor. Credit facilities should be established to help cooperatives finance their investment and working capital needs at reasonable rates. Access to these facilities should be linked to the cooperative's ability to generate its own matching funds (as with the requirement of contributing a share of machinery costs). All these efforts may require cooperation between the government and the donors.

### ***Development of a Multi-level Cooperative System for Denser Coverage***

Although service cooperatives and private service providers are definitely spreading in Central Asia, the coverage so far is very sparse. The example of Tajikistan shows that a machinery cooperative or a private machinery service provider may exist in one or two villages – with absolutely nothing in any of the other villages in the administrative district. Central Asian countries need a much denser network of service providers – cooperative or private – for its farmers and rural population. A distinct advantage of cooperatives is that they are naturally adapted to scaling up to a multi-level hierarchy: small, easily established, low-investment village-level cooperatives can form larger, more capital-intensive second-level cooperatives that will scale up the first-level services to a cluster of villages or the whole district. Take the example of a dairy cooperative system: first-level cooperatives in villages simply need a refrigerated tank for milk collection from households and farms; the second-level cooperative will have to invest a refrigerated tanker for collecting milk from the village-level cooperatives and transporting it to the central processing facility. In this way, the investment costs are spread over the two-level system, without unduly overburdening any of the cooperatives.

The cooperative system in market economies is usually made up of a hierarchical structure consisting of several levels. The bottom level consists of the “local” or primary cooperatives, i.e., cooperatives created by producers “bottom-up” in villages. The next level are the “regional” cooperatives, which are created by local cooperatives from considerations of economies of scale. Thus, processing enterprises (a dairy, a flour mill, a fruit-and-vegetable canning factory) are not needed in every village: one enterprise can serve processors from many villages in the same region, accepting deliveries from lower-level local cooperatives.

Regional (or secondary) cooperatives in turn may associate in tertiary (national-level) cooperatives, whose role is to represent the interests of local and regional cooperatives to the government (i.e., lobbying) and deal with general issues of economic and organizational development (e.g., export promotion). These national cooperatives are notionally similar to the cooperative “unions” introduced in the CIS legislation on consumer cooperation, with one significant difference: the entire multi-level cooperative system in market economies evolves “bottom-up”, starting with local primary cooperatives created by producers in villages, whereas “consumer unions” in CIS legislation are guided by Soviet ideology and created “top-down” by state dictates.

## REFERENCES

- Abele, S. and Frohberg, K., eds. (2003). *Subsistence Agriculture in Central and Eastern Europe: How to Break the Vicious Circle*, Studies on the Agricultural and Food Sector in Central and Eastern Europe, Vol. 22, IAMO, Halle.
- Agriculture Canada (processed). *Agricultural Co-operatives: A Startup Guide* [[www.agf.gov.bc.ca/busmgmt/bus\\_arrange/bus\\_arrang\\_pdf/coop1.pdf](http://www.agf.gov.bc.ca/busmgmt/bus_arrange/bus_arrang_pdf/coop1.pdf)]
- Autrey C. and Hall, R. (2009). *The Law of Cooperatives*, American Bar Association: Business Law Section, Chicago, IL.
- Beyshenaly, N. and Namazova, B. (2012). *Development of Agricultural Cooperatives in the Kyrgyz Republic* [in Russian], IAIR – Institute for Analysis and Development Initiatives, Bishkek.
- Cobia, D., ed. (1989). *Cooperatives in Agriculture*, Prentice Hall, Englewood Cliffs, NJ.
- EBRD (2012). *Transition Report 2012: Integration Across Borders*, European Bank for Reconstruction and Development, London.
- FAO/REU survey (2012). *Survey of registered cooperatives and peasant farms across Kyrgyzstan*, implemented by El-Pikir, Bishkek.
- ICA (2013). “Co-operative identity, values & principles,” International Cooperative Alliance [<http://ica.coop/en/what-co-op/co-operative-identity-values-principles>].
- Kyrgyzstan in Numbers (2012). *Kyrgyzstan v Tsifrakh 2007-2001* [Russian], Bishkek.
- Kyrgyzstan Strategy (2012). *Agro-Business Development Strategy for Kyrgyzstan 2013-2020* [in Russian], Ministry of Agriculture and Melioration of the Republic of Kyrgyzstan, prepared with FAO Technical Assistance, Bishkek.
- Lerman, Z. and Sedik, D. (2009). *Agricultural Recovery and Individual Land Tenure: Lessons from Central Asia*, FAO/REU Policy Studies in Rural Transition No. 2009-3, FAO Regional Office for Europe and Central Asia, Rome-Budapest. [[http://www.fao.org/fileadmin/user\\_upload/Europe/documents/Publications/Policy\\_Studies/AgDevelopmentCA\\_en.pdf](http://www.fao.org/fileadmin/user_upload/Europe/documents/Publications/Policy_Studies/AgDevelopmentCA_en.pdf)]
- Mather, J.W., K.C. DeVille, A.L. Gessner, and C.C. Adams (2004). *Farm Marketing, Supply and Service Cooperative Historical Statistics*, USDA, Cooperative Information Report 1, Washington, DC.
- Plunkett Foundation, 1995. *Review of 1994 Activities*, Plunkett Foundation, Oxford.
- Tajikistan Strategy (2011). “Resolution of the International Conference on Agrarian Reform in the Republic of Tajikistan, Dushanbe, 15 April 2011”, prepared with technical assistance from FAO and the Donor Coordination Council, Dushanbe.
- USDA (2013). *USDA Rural Development: Cooperatives*, USDA Rural Development web site [[http://www.rurdev.usda.gov/LP\\_CoopPrograms.html](http://www.rurdev.usda.gov/LP_CoopPrograms.html)]
- Van Bekkum, O. and Van Dijk, G. (1997). *Agricultural Co-operatives in the European Union*, Van Gorcum, Assen.

WOCAT (2010a). “Rotational grazing supported by additional water points”  
[\[http://qt.wocat.net/qt\\_summary.php?lang=english&qt\\_id=148\]](http://qt.wocat.net/qt_summary.php?lang=english&qt_id=148)

WOCAT (2010b). “Livestock committee at village level”  
[\[http://qa.wocat.net/SummaryApproach.php?selected\\_id=269\]](http://qa.wocat.net/SummaryApproach.php?selected_id=269)

**FAO Regional Office for Europe and Central Asia**  
***Policy Studies on Rural Transition***

2013-6	<i>Сельскохозяйственная обслуживающая кооперация в Украине</i> Роман Коринец
2013-5	<i>Agricultural cooperatives in Israel</i> Gadi Rosenthal and Hadas Eiges
2013-4	<i>Cooperative development in Central Asia</i> Zvi Lerman
2013-3	<i>An overview of cooperatives in Turkey</i> Nedret Durutan Okan, Cüneyt Okan
2013-2	<i>Agriculture and Rural Cooperation, Examples from Armenia, Georgia and Moldova</i> John Millns
2013-1	<i>Association of farmers in the Western Balkan countries</i> Goran Zivkov
2012-6	<i>Экономика экспорта зерновых в Казахстане: Перспективы и анализ экспорта пшеницы</i> Ошакбаев, Рахим
2012-5	<i>Экономика экспорта пшеницы в Украине</i> Ирина Кобута, Александр Сикачина и Виталий Жигadlo
2012-4	<i>Wheat Export Economy in Ukraine</i> Iryna Kobuta, Oleksandr Sikachyna, Vitaly Zhygadlo
2012-3	<i>Issues Affecting the Future of Agriculture and Food Security for Europe and Central Asia</i> William H. Meyers; Jadwiga R. Ziolkowska; Monika Tothova and Kateryna Goychuk
2012-2	<i>Агрохолдинги России и их роль в производстве зерна</i> Узун В.Я., д.э.н., проф., Шагайда Н.И., д.э.н., Сарайкин В.А.
2012-1	<i>Europe and Central Asian Agriculture Towards 2030 and 2050</i> Jelle Bruinsma
2011-1	<i>Потенциал роста доходов сельского населения Туркменистана на основе альтернативных сельскохозяйственных культур</i> Иван Станчин, Цви Лерман и Дэвид Седик
2010-1	<i>The Feed-Livestock Nexus in Tajikistan: Livestock Development Policy in Transition (revised version).</i> David Sedik
2009-5	<i>Sources of Agricultural Productivity Growth in Central Asia: The Case of Tajikistan and Uzbekistan</i> Zvi Lerman and David Sedik
2009-4	<i>The Diversity of Effects of EU Membership on Agriculture in New Member States</i> Csaba Csaki and Attila Jambor
2009-3	<i>Agricultural Recovery and Individual Land Tenure: Lessons from Central Asia.</i> Zvi Lerman and David Sedik
2009-2	<i>The Feed-Livestock Nexus in Tajikistan: Livestock Development Policy in Transition.</i> David Sedik
2009-1	<i>Agrarian Reform in Kyrgyzstan: Achievements and the Unfinished Agenda.</i> Zvi Lerman and David Sedik
2008-1	<i>The Economic Effects of Land Reform in Tajikistan.</i> Zvi Lerman and David Sedik





**Regional Office for Europe and Central Asia**  
Food and Agriculture Organization of the United Nations  
34 Benczúr u.  
1068 Budapest, Hungary

Telephone: +36 1 461 2000

Fax: +36 1 351 7029

<http://www.fao.org/europe>