

Farmer Organizations in Armenia's Agricultural Development

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Abstract:

The purpose of this paper is to analyze cooperatives in Armenian fruit and vegetable sector and the dairy sector, reveal the existing problems, study the reasons why the speed of organization of new cooperatives is not fast enough, and find the factors that prevent farmers from taking advantage of the potential benefits. We also discuss governmental regulation of cooperation, the role of various NGOs and other supporting organizations and their contribution to farm consolidation.

Key words: Agricultural cooperatives, Regulation of cooperation, Farm consolidation

Introduction

Groups of individuals around the world and throughout time have worked together in pursuit of common goals. Examples of cooperation, or common action, can be

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traced back to the prehistoric predecessors, who recognized the advantages of hunting, gathering and living in groups rather than on their own (Zeuli 2004).

In the Soviet era, in Armenia, as well as in the neighboring countries like Georgia and Azerbaijan, most of agricultural production was centralized and implemented by Kolkhozes and Sovkhozes, where all property belonged to the state. Farmers were collectively working in those enterprises to reach the norms and the volumes set by the governmental planning agencies. That was the time when quite stable mentality had developed, disseminating the idea that every citizen had a job, but had to work for the state, however the benefits were both directly and indirectly returned to the population. The fact that a peasant could not have his or her own farmland and animals became a common ideology.

The independence and reforms brought many changes in the agricultural sector of Armenia and, particularly, raised the necessity for each farmer to be the manager/owner of his own business, which he never did before. The employee also became an employer. Open market system and steps towards liberalization brought new challenges related to marketing of agricultural production, acquisition of raw materials, lack of information and tough competition.

Armenia is a landlocked and mountainous country located in the South Caucasus with population of 3.22 million. An estimated 64% of population lives in urban areas, of which around half is based in Yerevan. Agriculture is the main source of livelihood for the one-third of population that lives in rural areas. With very few off-farm employment opportunities, rural inhabitants depend heavily on their small farms for survival (NSS of RA, 2008).

In early 1990s Armenia started implementing redistributive land reforms. The first outcome of this reform was very small size of the family farms, which on average was not more than 1.4 hectares of which only 1.1 ha arable (Lerman, 1999). The small farm sizes are not conducive to the application and usage of new innovative technology, which itself hinders the development of the sector.

As of January 2006, there were about 339,000 peasant farms, which possessed around 485,500 hectares of agricultural land. It is estimated that 88% of the farmers possess less than 2 hectares and they use 77% of the total land area (NSS of RA, 2007). Agricultural lands and animals were parceled out to individual families, and farm equipment was also distributed to individuals. The former system of collective farming collapsed, resulting in the emergence of a new farming system on small scale and subsistence basis.

Another outcome of the egalitarian reform was the emergence of regional differences. The average farm size varies by the regions. Average farm size in marzes of Ararat (0.61 ha) and Armavir (0.92 ha) were much smaller than, for example, in the marzes of Shirak (2.36 ha) and Syunik (2.97 ha). However this

comparison still misses important variables, namely the altitude, the water availability, and the soil quality (NSS of RA, 2008).

Efficient linkages of fruit and vegetable producers to the wholesale and retail markets, as well as the existence of a functioning middlemen system, is the base for the establishment of sustainable production and marketing chain of the agricultural produce. On the other hand, the excessive number of middlemen from farm gate to final consumers minimizes the profit margin of farmers in the value chain (Shepherd, 2007). The farmers in Armenia, marketing their produce separately, face difficulties in price competition with the imported products, which creates another reason to cooperate and leave only the very necessary middlemen in the marketing chain.

Farmers argue that political and legal environment is not conducive to the development of agricultural sector. The regulating role of the government is negligible (Hakhnazaryan, 2007). Although the fundamental laws related to agriculture are in place, many sub legal acts are either outdated or do not exist. Many amendments in the existing laws are needed.

For sure, farmers had always been cooperating, but that cooperation was not formal and had low action force for good price bargains, access to new markets, and provision of different services. Although in the 1990s by the effort of different NGOs the cooperatives in Armenia were organized, the appropriate legislative basis is needed for their effective operations. There is still no “Law on Cooperatives” in the country. It is important to have a defined status and criteria for farms, cooperatives and cooperative unions, to ensure their sustainable development. Currently only the Armenian Civil Code covers issues about “Cooperatives” in Chapter 5, article 117-121 (IRTEK 2007).

For this research a baseline study was carried out to find information on the already established farmer organizations, methods of their cooperation, level of participation of the supporting institutions working with these organizations, as well as the reasons why there are so few farmer organizations in the country. This will contribute to the development of cooperation and agricultural development. The objectives of this study are to identify factors that hinder cooperative movement in agriculture, and to assess the potential of cooperatives for agricultural development in Armenia, including cultural, historical and political aspects.

Methodology

Each case study is comprised of two cooperatives, which were established with the assistance of a supporting institution – FAA (Federation of Agricultural Associations), UMCOR (The United Methodist Committee of Relief) or CARD

(Center for Agribusiness and Rural Development). For each FO (farmer organization), interviews were conducted with 2-3 key informants who were members of the management team in the FO, in order to get first hand information. Focus group discussions with 5 -7 members of the FO then followed. Non-organized farmers from a neighboring village, who had information on the organized FO, were also interviewed in small groups of 5-7 to find out why they had not organized an FO in their own village.

Case Study – 1 (FAA - UMCOR)

This case study consisted of interviews with members of two farmer organizations ('Lukashin' and 'Arevabuir') established by FAA and UMCOR, and discussions with people living in neighboring villages who had information about 'Lukashin' and 'Arevabuir' FOs.

'Lukashin' FO and Khanjyan village

'Lukashin' farmers organization is a consumer cooperative located in village Lukashin of Armavir region. The main agricultural activities are production of fruits (peach, grapes, plums, apples) and vegetables (cucumber, cabbage, carrots, tomatoes, paprika, and herbs). Farmers in this village also specialize in livestock production (mainly cattle, pigs, and goats). The 'Lukashin' FO was established in April 2005 by FAA with the assistance of UMCOR, under its FOSPA (Farmer Organizations Support Program in Armenia) project. The objective was to help farmers to jointly solve their common problems in their activities, which related to marketing of agricultural produce, access to agricultural inputs, as well as access to credits and technical knowledge. The cooperative was started with 42 members (36 males and 6 females) and within 2 years following its establishment increased its membership up to 52 with 10 associate members. The organizational structure is formed according to the bylaw of the organization. The FO manages its financial system by keeping balance sheets, cash flow statements and income statements. This is done by the accountant who makes the members aware on the financial state of the FO at their general meetings. The General Assembly consisting of all member farmers meet once every 3 months to discuss problems, find solutions and plan for the future.

When decisions have to be made, members vote according to the one-member one-vote principle. In situations when quick decisions have to be made, the five board members meet to decide on behalf of the other members. Being a member of the cooperative, each farmer is expected to contribute 300 AMD (Armenian Dram) per month, which is set by the bylaw. Aside this payment, members are required to pay 10% of the total transportation costs as a service fee in cases if the organization has to market their produce or purchase farm inputs. Members obtain a lot of

benefits from the FO, which include: sales of their produce, access to trainings on good agricultural practices and farm management, access to loans and agro-chemicals, which they would not be able to acquire if working as individuals.

For effective provision of services to member farmers, the FO cooperates with other institutions, and is a part of Federation of Agricultural Associations in Armenia. The FAA supports farmers through provision of loans at 12% interest rate and a repayment period of 6 months. Members receive these loans in the form of necessary agricultural inputs. The FAA also provides training and consultancy services for the FO. UMCOR, another major partner, assists in provision of training sessions in accounting, bookkeeping, and farm management. The 'Apaga Serund', an NGO in the Armavir region, assists in the socio-economic development. 'International Center of Agribusiness Research and Education' Foundation provides educational training programs, especially for youth, to involve them in development of the community. 'Save Children' NGO supports the farmers by providing water through construction of wells, which helps them to irrigate fields and have water for their households. The FO was well organized and managed, members were satisfied with the provided services, and were quite optimistic about the progress and the future development plans of the organization. Members trusted each other and saw themselves as a family working together to improve their economic situation. This had generated the interest of the farmers in the neighboring village Khanjyan who had heard of the success story of this FO and the benefits member farmers had. They expressed their willingness to form a cooperative in their own village. Even though they were willing to cooperate, they did not know how to organize themselves and were waiting for a supporting agency to start such an organization in their village as it was done in Lukashin.

It can be concluded that 'Lukashin' FO, together with the FAA, can support in the organization of farmers in Khanjyan village, as they are willing to cooperate. The farmers can be supported in their activities by the already established 'Lukashin' FO. Women should be motivated and encouraged to join the cooperative and take more active role in running that cooperative (Harutunyan 2007). Members mentioned lower prices received for products sold and expressed their desire to have their own capital to provide loans for the members. Women can be supported to form small scale enterprises, which can process some of the produce (e.g. dried fruits) to be sold during the lean season.

'Arevabuir' FO and Mrgavet village

'Arevabuir' farmer organization is a consumer cooperative located in the village Arevabuir of Ararat region. The main agricultural activities are production of greenhouse vegetables, including tomatoes, cucumber, and paprika, and fruits (apples, peaches, grapes), as well as livestock such as sheep, cattle, and pigs. The

FO was established in May 2003 by the FAA with the assistance of UMCOR, under its FOSPA project. Initially, the cooperative was specializing in mushroom production, which was quite risky and volatile business for that region, and which became a reason for big losses for many farmers. The objective was to help farmers to jointly solve their common problems, related to marketing of agricultural produce, access to agricultural inputs, and access to credits and technical knowledge. The cooperative was started with 28 members (27 males and 1 female), and by the year 2007 the number of members increased up to 34 (31 males and 3 females), in addition to the 11 members who are currently in approbation period. The organizational structure is formed according to the bylaws of the organization.

Just like the previous case, the FO manages its financial system by keeping balance sheets, cash flow statements and income statements. This is done by the accountant who makes the members aware, at their general meetings, on the financial state of the FO. The General Assembly, consisting of all the member farmers, meets once every 3 months to discuss their problems, find solutions and plan for the future. At the General Assembly the 100% quorum is not mandatory and the decisions can be made with only 2/3 participation of members. When decisions have to be made, members vote, each having only one vote. In situations when quick decisions have to be made, the five board members meet to decide on behalf of the other members.

Members obtain a number of benefits from the FO, including timely sales of their farm produce, getting access to training on good agricultural practices and farm management, access to loans and agro-chemicals, which they would not be able to purchase if operating as individuals. The FAA supports farmers through provision of short term seasonal loans; however members receive these loans in the form of the required agricultural inputs. The FAA also provides training and consultancy services to the FO. Mainly before 2006, the UMCOR was assisting in provision of training sessions in accounting, bookkeeping and farm management, to improve member farmers' financial management. Currently a few Dutch organizations and other supporting institutions help to provide services to farmers through the FAA and through the 'Arevabuir' cooperative.

The interviews in the neighboring village Mrgavet presented the farmers' willingness to get access to such services as the 'Arevabuir' FO provides. To conclude, the 'Arevabuir' FO, together with the FAA, can support in organization of farmers in Mrgavet village as they are willing to cooperate. The farmers can be supported in their activities by the already established 'Arevabuir' FO. More women should be motivated and encouraged to join the cooperative (Harutunyan 2007). Women can be supported to form a small scale enterprise, which can process some of the produce (e.g. dried fruits) to be sold during the lean season. Production of herbal teas (mint, thyme) can be another option.

Case study – 2 (CARD)

Two milk marketing cooperatives established by the CARD were visited: ‘Vahan’ and ‘Khachik’.

‘Vahan’ milk marketing cooperative

This cooperative was established by CARD² in July 2001 in Vahan village of Gegharkunik region with 33 members and is now supported by the CARD cooperative development program. The total membership is 60. The cooperative was formed with the aim of joint collection and marketing of milk produced by the member farmers of the village. Member farmers supply milk daily to the cooperative. The cooperative has storage and cooling facilities to store the milk for selling out and also test its quality. Member farmers with many cows have the cooperative car coming to their farms for collection of milk. Payments for the sold milk are made back to the farmers in the form of patronage refunds after deducting the operating costs (payments for the employed staff, utility costs, etc.). Members are required to pay a monthly fee of 450 AMD to the cooperative. Training, consultancy and technical assistance from CARD cooperative development program are sometimes organized for members to help them improve on the quality of milk. Loans are provided to the member farmers by ‘Aregak’ microcredit program. ‘Heifer International’ also supports farmers giving them pregnant cows, which they return after three years. The cooperative has successfully increased the number of cows kept by their members through this project, which has led to the increase in milk output of the cooperative and consequently the increase in income of the farmers.

Members of the cooperative mention the FO as an assured market for small amounts of milk that they produce. Payments are made on time, members are happy with the way this was done, and they are willing to continue working with the milk marketing cooperative. To sustain the cooperative and its relation with the processing company, the cooperative should organize more training sessions for its members on milk quality improvement, animal husbandry, farm management and financial management of the cooperative, on a regular basis. Building capacity for the members will ensure an improvement in the level of production. The cooperative has future plans to have its own cheese processing company to process the milk collected from the member farmers.

2 CARD is the successor of the USDA MAP (United States Department of Agriculture, Marketing Assistance Project)

'Khachik' milk marketing cooperative

This cooperative was established in March 2000 in Khachik village of Vayots Dzor region. With 70 members (58 males and 12 females), it is supported now by CARD cooperative development program. The cooperative, like the previous one, was formed with the aim of collecting and marketing the milk produced by member farmers in the village and processing it into dairy products. Member farmers supply milk daily to the cooperative. The cooperative has storage and cooling facilities to store the milk for further processing and also test its quality. 'Khachik' milk marketing cooperative is processing the collected milk for cheese production under "White Spring" brand name.

Khachik village is one of the highest-elevation villages in Armenia. The main activity is agriculture and animal breeding. Khachik is in the boundary of Armenia and has strategic importance for the country. The government should motivate villagers to stay in their homes, but because of insufficient government support, the 'Khachik' milk marketing cooperative takes the role of assisting organization for its member-farmers.

Member farmers bring milk to the cooperative's milk collection center using their own transportation means. Farmers get paid for the milk after deducting the operating costs (payments for employed staff, utility cost, etc.). Members are required to pay a monthly fee of 400 AMD to the cooperative. Training, consultancy, and technical assistance from CARD cooperative development program are sometimes organized for members to help them improve milk quality. Loans are also provided to the member farmers by 'Aregak' microcredit program.

Members of the cooperative mention that the cooperative is an assured market for their small quantity of milk they produce. Payments are usually made on time, sometimes within one week, and the members are happy with the way this is done. To sustain the cooperative and its relations with the processing companies, the cooperative should organize more training sessions for members on milk quality improvement, animal husbandry, farm management and financial management, on a regular basis.

Findings

Cooperatives established by the FAA and UMCOR are fruit and vegetable producing cooperatives and are located in the regions where these agricultural products have traditionally been produced. Cooperatives founded and currently supported by CARD are involved in milk collection, marketing, and processing into cheese. The main objectives of cooperation are marketing of agricultural produce and receiving financial assistance from supporting institutions.

There are more men than women in all studied cooperatives. For one to become a full member he or she has to pass a probation period of one year before being registered as a member. During this period, the principles and procedures of the cooperative are explained and the farming activities of the individual are observed.

The structure of the cooperatives is defined according to their bylaws, and it is quite uniform. The General Assembly, consisting of all cooperative members, is the highest authority. Members own the cooperative and make managerial decisions. All members meet once every three months to discuss their priority areas and approve the projects to implement. Each member of the cooperative has only one vote according to the bylaws. The Board of Directors consists of five members, who identify priority areas and see to the implementation of projects of the FO. In situations where quick decisions have to be made, the board members meet to decide on behalf of the cooperative. There is an FO manager who manages the day-to-day activities of the organization. The Audit Committee, consisting of three members, controls the financial aspects of the FO. The cooperatives also have other employees, like agronomist and veterinary who provide training and consultancy services.

Membership fee varies from 300-6,000 AMD per month. For the FAA cooperatives, membership fee is 300 AMD per month. Aside that fee, members sometimes have to pay a 10% service fee as transportation cost, if the cooperative provides selling service of agricultural products or transportation services for various agricultural inputs. Members have the benefit of marketing for their produce, access to low interest loans, access to training, as well as access to agrochemicals, seeds, fertilizers, and fuel.

Representatives of UMCOR, CARD, and the FAA visit the rural areas and inform non-organized farmers about the importance of organizing a cooperative. Charismatic village mayors, after realizing the importance of cooperation, are usually the initiators or leaders who organize and consolidate farmers in the village. Most of the cooperatives were established in regions in close proximity to Yerevan, and in villages near the Azerbaijani border. The supporting organizations assist in the form of financial assistance, supply of farm inputs and equipments, training and marketing of agricultural produce.

Cooperatives keep books: balance sheet, cash flow statements, and income statement. Skilled accountants run the finances of the cooperatives. From all the cooperatives studied, the management positions were held by men.

Besides UMCOR, the FAA and CARD, most supporting institutions do not work directly with farmers. They coordinate with the FAA to implement projects for the farmers' benefit. The supporting institutions assist in supply of inputs and equipment, lobbying on behalf of the farmers, marketing of products both on the

local and foreign markets, provision of legal, financial and investment services and many other services.

The following is a list of weaknesses of the cooperatives that may lead to their failure.

Lack of understanding of the three main principles of cooperative

This is perhaps the main reason for failure of cooperatives. Some members fail to understand that the cooperative is owned by the members and not solely for the manager. They do not understand their rights in the cooperative and do not take active participation in decision making of the cooperative.

Poor management

This may also lead to cooperative failure. Some managers lack leadership skills and do not run the cooperative efficiently. Both the FAA and CARD organize training programs for managers and encourage their active participation.

Irrigation (in Lukashin cooperative)

In a household survey it was found out that only an estimated 18 percent of all agricultural land was irrigated. In total 44.2% of the households indicated that they did not utilize, partially or totally, their land. The most important reason was 'no irrigation or limited irrigation' (Hakhnazaryan 2007).

Rural finance and access to credit

The cost of capital paid by farmers is quite high and reaches on average 24%. Most of the commercial banks do not lend to the agricultural sector, except to those farms that are sufficiently large and integrated into the value chain. The problem of collateral is a barrier to credit and remains quite significant in the Armenian agricultural sector. Banks require up to 200% of collateral. Even farmers willing to pay higher interest rates may not have enough assets to collateralize the amount of loan they need. In case of the FAA, its FOs get short-term seasonal loans in more favorable terms for their operations.

Agricultural inputs and technology

The vast majority (93%) of the present agricultural machinery and equipment is worn out. Rental markets for machinery and machine services apparently exist in rural Armenia, and this reduces the need for traditional ownership. But this situation creates another problem. Being the only farm machinery owners in their village, or even in the region, these people act as monopolists and set very high prices for their service, leaving the farmers with no choice. The main solution to

this problem is acquisition of agricultural machinery and equipment, as well as agricultural inputs through FOs and shared-use practices.

Marketing of agricultural produce

The problem of selling agricultural produce remains a difficult bottleneck for small peasant farms. This is explained, on one hand, by the poor purchasing ability of the consumers at the internal market, and, on the other hand, by the difficulties in exporting caused by the transportation blockade (Alpha Plus Consultancy, 2005). In general, agricultural cooperatives proved to be the only organizational institutes through which rural areas can be developed, and particularly, farmers can have opportunities to solve their common problems in more effective and efficient ways. This is the only reason why farmers unite and create cooperatives. By solving their common problems, they directly contribute to the development of the above mentioned areas of the Armenian agriculture sector.

Analysis of Results, Conclusions and Recommendations

Cooperatives apply three very important and interrelated components through which the cooperative implements its activities. Each component has a unique mechanism of implementation (Hakhnazaryan 2007). The components are:

- *Financial component*: securing financial resources for members' operations.
- *Technical component*: this providing improved knowledge and services for members.
- *Social component*: implementing social and cultural development activities at the local level, and applying the User-Owner principle.

The present stage of development of the agricultural cooperatives worldwide is the result of 100 years of experimentation, innovations and improvements. Adaptation of innovation technologies can become one of the key factors in improvement of FO activities (Hakhnazaryan 2007). Some of the problems encountered by the agricultural associations in Armenia have been identified as follows:

- Lack of leaders' management ability;
- Lack of product development ability;
- Inadequate system of national/regional level research institutions;
- Insufficient study and research of consumers' needs and market trends;
- Failure to establish brand names;
- Lack of development of distribution channels;
- Inadequate linkages with the public information, events planning;

- Insufficient public relations in rural areas;
 - No linkages with regional agriculture promotion plans;
 - Raw materials are expensive;
 - Operations are seasonal;
 - Processors tend to operate independently.

This section of suggestions describes the most important conditions with implementation methods and approaches, in order to succeed during adaptation of innovation technologies at the agricultural cooperatives, which is the key factor for the sustainable and dynamic development of agricultural cooperation in Armenia.

- There should be linkages to create dynamic systems of innovation. The system's effective operation is mainly related to the flow of information among cooperative member farmers, extension specialists, and cooperative associations. It is suggested to use TOT (Training of Trainers) practices to create such linkages and to operate it effectively (Hakhnazaryan 2007).
- There should be new attitudes towards innovation practices, which involve technical, organizational, and other sorts of changes. In this regard, the local educational centers and farm management centers play major roles.
- Innovation should be considered as the application of knowledge of all types to achieve desired social and economic outcomes. During innovation process the farmer organizations implement the production of goods and services that are new to them and should comprise both radical and small improvements and a continuous process of upgrading. A good example of such practices is 'Demo Farming' (demonstration farming) activities at the cooperatives members' farms, where all the provided improved knowledge is applied. These proposed actions can enable cooperative members to see and measure their performance and identify any necessary actions to be implemented towards overall sustainable development of the sector.

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