Rural Credit Institutions in Armenia: Credit Clubs

By

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Abstract

This research project aims at studying the challenges of agricultural and rural finance in Armenia. Strengthening the rural credit markets and institutions in Armenia is of paramount importance. The study reviews and analyzes the outcomes of the Agricultural Credit Club Program implemented by the US Department of Agriculture Marketing Assistance Program (USDA MAP). Currently USDA MAP has established 50 Credit Clubs/Unions operating in 10 regions of Republic of Armenia. The total number of farmers enrolled in the program is 882: all of them involved in various agriculture related activities, such as tomato, potato, wheat, grapes, fruits, milk production and etc. The study identifies the attitudes and perceptions of member farmers relating to the level of interest rates and access to credit. The findings in this regard provided clear indications of the challenge facing the improvement or even development of rural financial markets and agricultural credit institutions from the demand side of agricultural credits. The study concentrates on several important issues like: problems with loan collateralization in rural areas, land reform and property rights, transaction costs for monitoring rural credits, the role of government in rural credit and finance markets, and the role of specialized agricultural credit institutions like credit clubs. The research was based on surveys and interviews. Surveys of credit club members have been conducted to identify and measure the benefits of such a rural credit cooperative initiative. Based on findings certain recommendations haven been proposed regarding to the rural finance and credit mechanisms. Using SPSS a number of statistical tests have been carried out.

CONTENTS

INTRODUCTION……………………………………………………………………………4

Armenia in Transition………………………………………………………………..6

Egalitarian Land Reform……………………………………………………………….7

Agricultural Credit and Rural Finance in Armenia.....……………………….……………...10

Empirical Evidence on Rural Household Finance.......……………………………………16

Financial Assistance Program of the USDA MAP ……………………………….......17

Credit Clubs ………………………...……18

USDA MAP Agricultural Credit Club Program ....………………………………….20

Regulatory and Legal Framework ....………………………………………...22

Women Credit Clubs ……………………………………………………..........................24

Gender Statistics of Credit Clubs ………………………………………………….......25

The Credit Club Survey ……………………………………….....................................25

The Results ....……………………………………..26

Descriptive Statistics ....……………………………………26

Membership Status and Commitment …………...27

The Likert Scale Analysis …………………………………...28

Summary and Conclusions ……………………………………………………................28

Transition from USDA MAP to CARD …………………………………………................31

REFERENCES………………………………………………………………………...32

INTRODUCTION

Agricultural credit and rural finance play important role in the recovery and growth of transitional countries. Rural credit and finance problems are caused by a combination of “normal” imperfection of rural credit markets and specific transition problems such as macroeconomic instability, institutional reforms of the financial system, low profitability in agriculture, high risk and uncertainty, and general contract enforcement problems (OECD, 2001).

Problems of imperfect (asymmetric) information, lack of collateral, and low profitability make banks view the agricultural sector as a high risk consumer. The changes of agriculture together with macroeconomic uncertainty have created difficulties in the normal process of financing agricultural activity. The problems in the credit market for agriculture stem from both demand and supply forces (Gow & Swinnen, 1997).

While early discussions of the finance problems focused mostly on the institutional problems, later studies emphasize profitability and cash flow problems (Dries and Swinnen, 2002). An important factor in the cash flow and profitability problems are contract enforcement problems throughout the agro-food chain (Gow and Swinnen, 2001). A survey of food companies in Central Europe identified payment delays as their constraint number one for growth (Gorton et al. 2000) cited by Dries (2002).

Widespread forms of contracting problems like long payment delays or non-payments for delivered products (Swinnen, 2005) were apparent in Armenia during the transition.

In general, the model of agricultural transition in Armenia is similar to that of other transition countries in the region (Cocks, 2003). Like in many transitional countries of Europe and Central Asia (ECA) a major problem in Armenia during the transition period was the breakdown of the relationships of farms with input suppliers and output markets. The result is that many farms and rural households face serious limitations in accessing essential inputs (feed, fertilizer, seeds, etc.) and selling their output (Swinnen, 2005).

After the collapse of the former state and collective farms, established food processors in Armenia and in other former soviet republics, have lost guaranteed, state directed, supplies and demand. They have had to establish their own relationships to effectively acquire agricultural raw materials. Restructuring and privatization has led to the separation of many previously horizontally and vertically integrated enterprises together with the emergence of new type of businesses (White and Gorton, 2004). This itself led to a situation of widespread financial distress, high discount rates, and a lack of contractual enforcement (Cocks, 2003) and hold up problems (Gow & Swinnen, 2001).

Surveys in many transitional countries have shown that from the perspective of farm borrowers the primary issue in rural finance has been the level of interest rates on loans. Another survey in CEE countries reflects the general view that limited access is not the primary problem, rather interest rates are perceived to be simply too high (Pederson & Khitarishvili, 1997). It's important to understand the difference between farmers' perceptions of "limited access" and the problem of high interest rates. Pederson and Khitarishvili (1997) define "limited access" to credit as; a situation where a borrower is not able to get the requested amount of credit, regardless of the willingness to pay a higher interest rate to the lender. Limited access occurs when there is nonprice credit rationing, meaning that some individuals or groups cannot obtain loans at any interest rate (Gow & Swinnen, 1997). The perception of high interest rates means first of all the availability of credits at a price (Pederson & Khitarishvili, 1997).

The aforementioned problems common in many transitional countries are still apparent in Armenia. The lack of credit inhibits the development of cash crops, which require higher input costs. Farmers are in a survival mentality (Matosyan and Harmon, 2003). Lack of financial means is a major factor that prevents farm households from using all their agricultural land.

According to recent UNDP household survey conducted in Armenia, in total 20,7 percent indicated that they had no financial means for cultivation and therefore left fallow part of their land or rented it out. The access of financial services for the majority of small farms in Armenia is quite problematic. A large number of state financial institutions have been dismantled and most commercial banks do not lend to agricultural sector, except to those farms that are sufficiently large and integrated into the value chain (Spoor, 2004).

In this paper we study rural credit and finance situation and challenges in Armenian agriculture with special emphasis on the development of the specialized credit institutions, particularly credit cooperatives.

Specialized credit institutions can be found in many different forms; credit co-operatives, state owned agricultural funds or development funds (Gow & Swinnen, 1997). The most important advantages for creation of specialized agricultural credit institutions are lower transaction, monitoring and verification costs through greater specialist knowledge of relevant agricultural activities. The idea is that this specialist knowledge mitigates the asymmetric information problems, and with it, the adverse selection and moral hazard problems, hence reducing credit rationing and stipulating lending to agriculture. The major disadvantage of these institutions are their higher portfolio risk due to their specialization, which puts them at great risk if there is down turn in the sector (Gow & Swinnen, 1997).

Armenia in Transition

Armenia is a landlocked and mountainous country covering an area of 29,800 km^2. It is located in the South Caucasus bordering Turkey, Georgia, Iran and Azerbaijan. The population of Armenia is 3.22 million (as of April 1, 2005), with another 5 million Diaspora (NSS, 2005).

The average elevation of the country is about 1,650 m. The climate is continental with hot summers and cold winters and annual rainfall varying between 300mm in the Ararat Valley to about 600mm in the rest of the country. The country is divided into 9 agricultural zones. About 40% of the total territory is not suitable for agriculture. The total area suitable for agriculture amounts to 1394.4 thousand hectares, including 494.3 thousand hectares of arable land (35.5%), perennial grass of 63.8 thousand hectares (6.4%) hay lands of 138.9 thousand hectares (10%), and 694 thousand hectares (49.9%) of pasture (See Table 1). Agriculture is very dependant on irrigation.

During the Soviet period Armenia was an industrialized country with a large rural population. Armenia was exporting its outputs chiefly to the other “brother” republics, and in turn relying on them for key inputs.

The severe earthquake in 1988 that destroyed more than a third of the production capacity followed by the collapse of the Soviet Union left Armenia in deep political, economic and social crises and eventually, war. The inherited governmental and legal infrastructure was seriously flawed, plagued with overwhelming levels of bureaucracy, corruption and nepotism (Kyureghian & Zohrabyan, 2005).

The market-oriented reforms introduced in 1991-92 comprised the privatization of many productive resources and organizations. Armenia was one of the former soviet republics to privatise agriculture effectively and swiftly during 1991-92: after independence followed the legislation necessary for the privatization of land, around 70% of arable land and agricultural output came into hands of individual peasant farms (Lerman & Mirzakhanian, 2001). Although by 1993 GDP declined to 47% of its 1990 level, and then gradually recovered to 68% in 2000, agricultural output did not show any significant declines during transition remaining stable during 1990-97 and increasing afterwards (Bezemer & Lerman, 2003). In recent years the share of agriculture in GDP comprised around 20-25 percent. During the last decade of the 20th century, Armenia thus transformed from an industrialized state to one that is to a significant degree agrarian (Lerman, 2003).

Egalitarian Land Reform and Emerging Agricultural Land Market

First in the early 1990s Armenia and Georgia, then Kyrgyzstan, and later on Moldova implemented redistributive land reforms (Spoor, 2004). The first outcome of this reform was the very small size of these family farms, which on average was not more than 1.4 hectares (of which only 1.1 ha arable). The small farm size is not conducive to the application and use of new innovative technology which itself hinders the development of the sector. The second was that primarily arable land (adding most of the orchards and vineyards) was privatized, while an important part of the hay land and pasture was kept in “state reserve”. Third, landowners received on average three parcels of land, of which one is irrigated and two non-irrigated.

As of January 2005, there were 338,502 (See Table 1) peasant farms, which possessed around 468,600 hectares of agricultural land. It is estimated that 88% of the farms are smaller than 2 hectares and they use 77% of the total land area. Twelve percent of the farms are larger than two hectares and they use 23% of land (MoA and FAO, 2002).

There is almost nothing changed until the first Land Balance was published in 1997 (See Table 1). So in most of the research studies this Land Balance Data is being used as a base line for comparisons and analysis. Updated Land Balance will be published in 2005.

Table 1: Number and Acreage of Peasant Farms (2000-2004)

	2000	2001	2002	2003	2004
Number of Peasant Farms, Units	332,608	334,759	334,688	337,906	338,502
Land Area of Peasant Farms (x 1000 Ha)	460.1	458.6	453.1	461.3	468.6
Average Size Peasant Farms (Ha)	1.38	1.37	1.35	1.37	1.38

	Agricultural Land	Arable Land	Perennial Grass	Fallow Land	Hay Land	Pasture
Land Balance (1997, x 1000 Ha)	1,391.40	494.3	63.8	0.4	138.9	694

Source: NSS 2005a; Statistical Yearbook of Armenia 2004.

Another outcome of the egalitarian reform was the emergence of regional differences. The average farm size varies by the regions. The average farm size in marzes (provinces) Ararat (0.61 ha) and Armavir (0.92 ha) were much smaller than 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, the soil quality, etc (Spoor, 2004).

Spoor found that individual peasant farms were leasing small plots of land (on average 0.18 ha), when their owned land on average was 1.37 ha (See Table 2). It was noted that the original land reform has only touched upon a relatively small part of the total agricultural land area of Armenia. In the year 2000, 477,141 ha was private land, while 924,625 ha was still state owned (See Spoor, 2004: 10-11).

Table 2: Owned and Leased Land by Peasant Farms: by Regions (2003)

(Ha)	Agricultural Land in use	Of which is owned	Of which is rented
Aragatsotn	1.79	1.73	0.06
Ararat	0.57	0.51	0.06
Armavir	1.16	1.01	0.15
Gegharkunik	1.77	1.54	0.23
Lori	2.13	1.68	0.45
Kotayk	1.58	1.53	0.05
Shirak	2.83	2.79	0.04
Syunik	2.48	2.03	0.45
Vayots Dzor	1.34	1.21	0.13
Tavush	1.18	1.14	0.04
Total Average	1.53	1.37	0.16

Source: AST Nr. 6 (November, 2004) based on a survey, borrowed from Max Spoor.

Egalitarian land reform resulted in a large number of small peasant farms that privately own most of the arable land, orchards, vineyards and some hay land. Pastureland still remained as state-owned. Land market and land lease market emerged in Armenia only by the late 1990s, until that time land was managed under informal or customary arrangements.

In his report Max Spoor discussed “push” and “pull” factors affecting the transactions in the agricultural land markets. The “push” factor tells about the rural poverty emergence and strategy to migrate, which for Armenia means cutting the important roots. Spoor mentions that in the case of emerging agricultural land lease market in Moldova, the “push” factor might be the fact of “no means or capacity to cultivate the land” (Spoor, 2004).

The “pull” factor for selling the land firstly comes from the neighbor farms that do well and want to expand. Second, the emerging agro-industry (wine/brandy production, or fruit and vegetable canning/processing) seeks vertical integration in order to be able to secure sufficient quality and quantity of supplied raw materials and hence invests in land. Finally land purchase has some speculative reasons: rich individuals or capital groups wish to speculate with agricultural land having the expectations that agricultural land will increase in value in the future. The aforementioned “pull” and “push” factors seem to be valid for newly emerging land sales and lease markets in Armenia.

Data provided by the State Cadastre Committee show that the land sale and lease markets are developing in Armenia. Table 3 indicates that land market developed quickly reaching a total of 5,984 land sale transactions in 2004. According to the SCC the land sale transactions numbered only 268 in 1998.

Table 3: The Agricultural Land Market in Armenia (2000-2004)

Agric. Land Alienation (nr)	2000	2001	2002	2003	2004
Aragatsotn	80	78	250	379	521
Ararat	364	618	675	950	1619
Armavir	318	270	341	588	1553
Gegharkunik	8	17	63	216	87
Lori	23	45	73	181	182
Kotayk	118	131	327	559	1477
Shirak	47	69	171	282	231
Syunik	2	14	15	66	161
Vayots Dzor	48	16	12	64	77
Tavush	15	29	6	27	76
Total Number	**1023**	**1287**	**1933**	**3312**	**5984**
Total Nr. Of Land Lease Transactions	**103**	**4355**	**3915**	**2110**	**-**

Source: SCC, Real Property Market in 1998-2003, and
Socio-Economic Situation of Armenia in Jan-Dec, 2004.
Note: Alienation means sales, donation and inheritance.

Since 2000 land lease transactions (officially registered) showed substantial growth. In 2001 and 2002 transaction numbers grew to respectively 4,355 and 3,915. In 2003 there was a decline in land lease transactions without reason. However, it's estimated that many lease operations are being done based on customary arrangements or without formal registration thus avoiding significant transaction costs.

Table 3 shows fairly large regional differences. The marzes of Ararat, Armavir and Kotayk represent around 78% of all sales of agricultural land in 2004. The agricultural land market is expected to grow quickly, because the government is pushing forward the land title registration.

There are many problems in land reform issues that inhibit the development of rural finance sector. The land reform is still incomplete. Completing the current process of land title registration will increase the land sales/purchases and will entail gradual concentration of land in the hands of more dynamic farms (Spoor 2004). There is statistical evidence (based on the number of land alienation transactions) that land market emerged already, but still land is hardly used as a collateral. The problem of collateral as a barrier to credit remains significant in Armenian agricultural sector. Banks require up to 200% of collateral level and require residential property in urban areas. Even farmers willing to pay higher interest rates may not have enough assets to collateralize the amount of loan they need.

Agricultural Credit and Rural Finance in Armenia

Table 4 shows the credits of commercial banks operating in Armenia in agriculture and food industry for the period of 2002-2004. Although total credits in agriculture have increased by 11.7%, the percentage of agricultural credits in total decreased by 1.4% in 2004. There is evidence that the portion of credits having a maturity of 1 year and more is increasing (See Table 4). Table also shows that credits in food industry have significantly increased reaching to a share of 39.4% in total industry credits. Agricultural loan portfolio made up about 1.7% of GAO in 2004.

The vast majority of Armenian banks refrain from financing agriculture due to the high risk of the sector.

Table 4: The agricultural credits of the commercial banks operating in Armenia

(in million AMDs)

	2002		2003		2004	
	Total	Maturity of 1 year and more	Total	Maturity of 1 year and more	Total	Maturity of 1 year and more
Total Credits, Leasing and Factoring to Residents	83,827	36,179	101,820	44,783	139,784	68,831
Of which						
Industry Total	32,191	16,059	29,771	16,546	35,593	19,341
Food Industry	10,122	5,435	10,438	5,534	14,037	8,429
% in Industry Total	31.4%	33.8%	35.1%	33.4%	39.4%	43.6%
Agriculture Total	**7,787**	**3,713**	**7,709**	**2,978**	**8,611**	**5,900**
Percentage in Total Credits	**9.3%**	**10.3%**	**7.6%**	**6.6%**	**6.2%**	**8.6%**

Source: CBA, "The Credits of Commercial Banks", 2002-2004.

The only bank that is having a serious share in lending to the agricultural sector is the ACBA Bank (Agricultural Cooperative Bank of Armenia), which in 2004 claimed to have more than 65 percent of the total commercial bank portfolio in agriculture (we expect that Bank 14 in Table 5 is ACBA). This seems to be a very good indicator, but the overall level is problematically low, and it is no surprise that the ACBA’s agricultural loan portfolio was only 8.8 million USD. However, ACBA Bank with its unique approach to banking and organizational structure typical for European cooperative banks continues its successful activities in financing Armenian agriculture (ACBA Annual Report, 2003).

ACBA Bank was founded in 1996 in the frames of TACIS project of European Union. Credit Agricole Consultants in cooperation with RIAS of the Netherlands and AG-Agroprogress Germany successfully implemented the feasibility study, followed by the establishment of the ACBA Bank. ACBA Bank is the only cooperative bank in the CIS and its institutional, financial and management structures were shaped based on the European cooperative bank model taking into consideration local socio-economic conditions and the requirements of the Central Bank of Armenia (CBA).

The Bank has a 3-level structure. The Agricultural Cooperative Village Associations (ACVA) are the first level of the Bank. In total 586 ACVAs have been set up, which have a total of 20,491 members with open access to the financial services of ACBA Bank. The Agricultural Cooperative Regional Unions are the second level of the Bank. As of November 2002, 10 Regional Unions are the sole stockholders of ACBA Bank. The third level of the bank is the

General Meeting, where the strategic policy of the bank is being worked out (ACBA Bank, 2003).

ACBA Bank provides loans to agriculture at 16-24 percent interest (in USD) and at 22-28 percent interest (in AMD) to members and non-members of the Agricultural Cooperative Village Association. ACBA Bank has begun providing collateral-free express credits of up to 1 million AMD (approximately $2,200) at 25% annual interest rate. The guarantee of three members of ACVA or the head of the cooperative is required. For other loans ACBA takes the following as collateral: immovable property-land, buildings, apartments, houses, fixed assets, working capital, vehicles, precious metal, livestock, electronics, furniture, etc (MEDI, 2003).

Table 5: The Credit Investments' Distribution of the Commercial Banks operating in Armenia

	Distribution of credit investments by sectors					**Distribution of the agricultural credits by banks**		
	Industry		**Agriculture**			**Agriculture**		
As of Dec. 31, 2004	Total	of which food Industry	Total	Plant Growing	Animal Husbandry	Total	Plant Growing	Animal Husbandry
Bank 1	5.3%	0.4%	5.3%	2.2%	3.1%	2.0%	2.0%	1.9%
Bank 2	15.6%	6.9%	0.5%	0.3%	0.2%	0.5%	0.7%	0.3%
Bank 3	61.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bank 4	54.9%	19.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bank 5	12.2%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bank 6	15.1%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bank 7	46.0%	0.0%	4.2%	0.0%	4.2%	0.1%	0.0%	0.2%
Bank 8	26.4%	2.2%	0.3%	0.1%	0.2%	0.2%	0.2%	0.2%
Bank 9	24.4%	11.1%	4.8%	4.6%	0.2%	5.9%	14.0%	0.4%
Bank 10	11.2%	4.6%	0.3%	0.3%	0.0%	0.3%	0.7%	0.0%
Bank 11	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bank 12	26.4%	25.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bank 13	28.2%	18.3%	0.1%	0.0%	0.1%	0.1%	0.0%	0.2%
Bank 14	**10.4%**	**6.1%**	**35.0%**	**11.5%**	**23.5%**	**66.4%**	**53.7%**	**75.1%**
Bank 15	22.4%	12.8%	19.2%	10.4%	8.8%	18.7%	25.1%	14.4%
Bank 16	8.5%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bank 17	12.8%	0.0%	2.4%	2.4%	0.0%	0.8%	2.1%	0.0%
Bank 18	36.4%	18.2%	2.6%	0.0%	2.6%	1.6%	0.0%	2.8%
Bank 19	22.3%	7.7%	1.5%	0.3%	1.2%	3.3%	1.5%	4.5%
Bank 20	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total by Sectors	25.5%	10.0%	6.2%	2.5%	3.7%			
Total by Banks						100.0%	100.0%	100.0%

Source: CBA annual report, 2004 (in Armenian).

From the table it's quite obvious that only 2-3 banks are relatively active in agricultural lending. We can say that these banks divided the rural finance among themselves, although unequally. It's clear that more than 66% of the credits in agriculture belong to one bank; the bank in the second place has 19% share of the total agriculture lending.

Other banks that do some lending to Armenian agriculture are assisted by the international programs and donors. Table 6 shows the banks and their loan products under the International Agricultural Development Programs.

Table 6. Loan Products of Banks Under International Agricultural Development Programs.

Bank	Product	Min. size	Max. size	Term	Interest	Target Population
Converse Bank	Agricultural Reform Support Program (legal entities)	$10,000	$50,000	< 5 years	12%	Agriculture and food industry (USD only)
Converse Bank	Agricultural Reform Support Program (farmers)	$500	$2,000	< 18 months	12%	Agriculture (USD only)
ArdShinInvest Bank	Agricultural Reform Support Program		$2,000	< 18 months	18%	Only to farmers in the regions
HSBC Bank	USDA Marketing Assistance Project	$10,000	$250,000	< 3 years	13% fixed rate of the outstanding loan amount	SMEs (food and agricultural). Selection is made by the USDA MAP.
Anelik Bank	USDA Marketing Assistance Project	$5,000	$50,000	< 3 years	13% fixed rate of the outstanding loan amount	SMEs and farmers, USD only. Terms of repayment to be settled by the contract

Source: MEDI 2003.

As of December 31, 2004 seven banks operating in Armenia serviced the loan programs of the following international and local organizations: German – Armenian Foundation, World Bank, EBRD, Eurasia Foundation, IFAD, National Center for SME Development, International Finance Corporation and International Migration Foundation. The main directions of the above mentioned credit programs were trade: 42% in total, **agriculture: 21.1% in total,** food industry: 8.3% in total and services: 8% in total (CBA, 2004).

The Central Bank of Armenia has increased the capital requirements of banks from $2 million to $5 million. It is expected that out of 20 banks only 10-13 banks will survive in the long run. The other banks will either close, merge or become licensed credit organizations under the Armenian "Law on Credit Organizations" (approved in 2002, which includes credit and savings unions, leasing and factoring companies, and universal non-bank financial institutions-NBFI).

There are now several NBFIs licensed under the aforementioned law. It's worth mentioning the agricultural loan products of the mentioned NBFIs, which again mainly operate due to international and donor programs (See Table 7).

Table 7. Loan Products of Selected Non-Bank Financial Institutions.

NBFI	Product	Min. size	Max. size	Term	Interest	Note
ECLOF (Ecumenical Church Loan Fund)	Provides group guaranteed agricultural loans	$500	Depends on business plan	< 1 year	12%	At least 3 farmers needed in the group
ANIV	Provides technical assistance and loans to rural enterprises	$2,000	$15,000	< 3 years	12% in USD, 14% in AMD	Collateral should be 200% of the loan. Takes immovable and movable property.
AREGAK	Provides agricultural loans to Women Groups	$100	Depends on performance	< 1 year	2% monthly	After every successful phase the loan needed will be increased by 40%. Interest is paid monthly. Collateral free.
KAMURJ	Group Guaranteed Agricultural Loans	300,000 AMD	600,000 AMD	< 1 year	2.7% monthly	Min. 10 farmers in the group from the same village. Interest should be paid monthly.
Izmirlyan-Eurasia Universal Credit Organization	Agricultural Loans (legal entities only)	$10,000	$125,000	< 4 years	15%	Collateral should be 150%-200% of the loan and immovable and movable property.

Source: Authors' personal interviews.

Two NBFIs are very active in agricultural leasing: ACBA Leasing (leasing company) and AgroLeasing (credit and leasing company).

ACBA Leasing was launched by ACBA Bank. It's as a mid-term equipment lending-leasing credit organization, which is providing secured equipment leasing to agricultural enterprises and associations of producers at the interest rate of 18-20% (MEDI Report, 2003).

AgroLeasing is introduced and funded by USDA MAP and registered as a local legal entity in 1999. As of October 2004, 106 lease agreements have been signed with over 40 enterprises through the AgroLeasing program with a total financial commitment of $2.3 million worth of equipment to fruit, vegetable and meat processors, wine and cheese makers, as well as machinery for regional farmer associations (USDA, 2005).

As it can be seen, rural and micro finance remains under the attention of the international organizations. Recently the International Fund for Agriculture Development (IFAD) allocated around $14 million for enterprise and community development and for rural finance area. Another donor project is the Agricultural Reforms Support Program financed by the World Bank (751 million AMD was allocated in 2004). The main objectives of the program at this stage will be the 1) contribution to the improvement and development of the resource potential of farms, cooperatives and processing companies, 2) increase the opportunities for processing companies and farms in getting agricultural credits (See Table 6).

There are several new programs that should be implemented according to the state mid-term expenditures for the period of 2004-2006 in the field of agriculture. The one worth mentioning is "The insurance risk assessment in the agriculture" (40 million AMD). The total agricultural area of the country is considered to be a risky zone. Every year natural calamities destroy around 25% of the agricultural production. With this respect an important issue is the functioning of the agricultural insurance system, which does not exist in Armenia currently. Before introducing the insurance mechanisms, a risk assessment should be done in the agriculture of Armenia, including the preparation of the methodology for each region; data collection, analysis and setting the insurance premiums based on different regions and climate zones.

Another new program (192 million AMD) will be the numbering and registering the agricultural animals (livestock, etc.). This project aims at improving the sorts and increasing the efficiency of veterinary services. This will also contribute to the creation of the preliminary conditions for using the **livestock as collateral when getting agricultural credits.**

Despite the fact that agricultural credit volumes are gradually increasing (See Table 4), due to mainly micro-financing organizations, however it satisfies only 8% of the credit demand (MoA, 2004).

One of the major problems inhibiting the development of rural finance is the unclear role of government. The Government should often intervene in agricultural credit markets, e.g. by providing guarantees to banks for loans, by setting up credit institutions special for agriculture and by subsiding credit to agricultural producers (Gow & Swinnen, 1997). In Armenia the role of government in contributing to the development of the agriculture credit markets is relatively low. The government should create an appropriate climate for the formation of the specialized agricultural credit institutions, which are widespread in Western European countries.

Farmers argue that political and legal environment is not conducive to the development of agricultural sector in general. Current political environment allows for corruption and resource allocation (e.g. land sale, lease). This is a glaring barrier for the sector's performance. The regulating role of the government is negligible. Although the fundamental laws related to agriculture are in place, many sub legal acts either outdated or do not exist. Many amendments in the existing laws are needed. Till now the "Law on Co-operatives" doesn't exist. It's important to have defined status and criteria for farms, cooperatives, unions, as well as other types of organizations, and elaboration of the relevant taxation mechanisms for application of VAT to fulfill the requirements of the WTO.

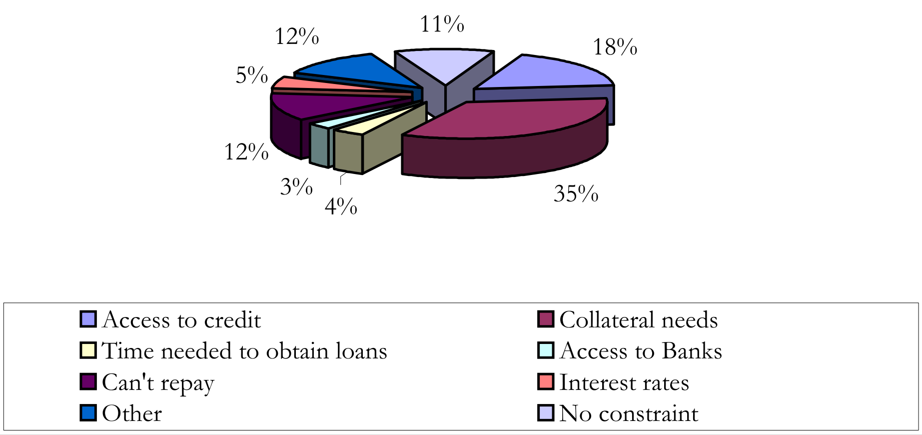
Empirical Evidence on Rural Household Finance

Several surveys have been carried out before aiming at revealing farmers access to credits and their problems. It's worth acknowledging the survey of both dairy and fruit/vegetable farmers in several regions of Armenia were conducted in 2004. The survey was conducted by the group of Agribusiness Teaching Center former students, under the supervision of primary research investigators from the University of Illinois - Urbana Champaign aiming at evaluating the USDA MAP supported various projects and activities.

The research group interviewed 341 rural households who were involved in any sort of agricultural production (dairy, fruits, vegetables, crops, livestock, etc.). At the moment of survey only 25% of the respondents borrowed some money for their agricultural activities. Surprisingly, from those who obtained credit, **58% got credit from their relatives and friends;** around 26% got loan from local commercial banks mainly from ACBA Bank (16%). The other sources were the USDA MAP agricultural credit clubs, input suppliers and other sources. It's obvious that social capital plays an important role in rural financing. Relatives and friends are the essential sources of rural household credits.

Although at the moment of survey only 25% of respondents were repaying their loans, almost everyone gave some sort of answer to the question - “What are your principle constraints to financing?” (See Figure 1).

Figure 1. Principle constraints to financing.



Source: Authors personal interviews with PRIs.

Thirty-five percent of the respondents stated that the major constraint is the collateral requirements, however 18% of households mentioned that access to credits is a principle constraint. Twelve percent of the respondents fear that they will not be able to repay the loan and are not eager to borrow. Only 5% said that interest rates are considered to be a constraint to financing.

Financial Assistance Program of the USDA MAP

The role of USDA Marketing Assistance Project as a third – party facilitator in the development of Armenian agriculture has been and remains significant. Through a package of marketing, technical and financial assistance USDA MAP aimed at increasing rural incomes, creating jobs and raising the standard of living of rural communities.

Strategic and timely financial support has always been a core element of the assistance package that USDA MAP has provided to the Armenian agribusiness sector over the past decade. Till 1996, the main form of assistance from USDA consisted of small grants designed to investigate the potential of Armenian food processors and agricultural marketing projects. In 1997, USDA designed a lending program that consists of three components. Micro-enterprise loans, which are smaller loans (up to $5,000) for short-term assistance. Strategic loans, which include larger amounts (up to $50,000) and medium term loans, and in-kind loans, designed to allow USDA to help subsidize the cost of acquiring production materials such as packaging, bottles, corks and related materials (USDA, 2005).

Since the initiation of its loan program, the USDA MAP has issued around 328 loans totaling $11 million. The target client has nearly been a new business or one that is launching a new product, criteria that local banks traditionally find too risky (USDA, 2005).
One of the most successful financial assistance projects introduced in Armenia by the USDA is the creation of "Credit Clubs". The USDA MAP launching this program aimed at providing direct technical and financial assistance to the farmers.

Credit Clubs

The concept of **US Credit Unions** was used as a keystone for launching the Credit Club program. USDA MAP invests the initial capital, expecting no return on its equity; members make membership payments to their own fund, thus building own capital for the future.

Theoretical Framework

Credit Unions vs. Cooperatives

A cooperative is defined by the International Cooperative Alliance 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, 1995) according to the following principles: a) Voluntary and Open Membership, b) Democratic Member Control, c) Member Economic Participation, d) Autonomy and Independence, e) Education, Training and Information, f) Co-operation among Co-operatives, g) Concern for

Community. The goal of these list of Principles is to provide a benchmark against which entities can be compared, to establish whether they are genuine cooperatives or not (Ward and Mckillop).

Fairbairn (1994) states “cooperatives are owned by those who use them, not by investors or partners whose interest is to make a profit from them”. This description emphasizes the main difference between cooperatives and normal profit-seeking entities. The first documented cooperative institution was founded in 1844 in Rochdale, England. The majority of Rochdalian cooperative principles are still in existence today and form the backbone of the current list of “Cooperative Principles”.

Credit unions are cooperative financial institutions without any doubt. Credit unions are defined by Berthoud and Hinton (1989), cited by Ward and McKillop, as being co-operative societies that offer loans to their members out of pool of savings that are built up by the members themselves. The mentioned interpretation does not refer to the purpose of credit unions. However, it does describe them as being co-operatives, therefore co-operative principles could be inferred as being the purpose of credit unions (Ward & McKillop).

The first evidence of cooperative banking was found in Germany in the late 1840s when Hermann Schulze-Delitzsch formed the first cooperative people’s bank. Later Friedrick Wilhelm Raiffeisen adopted the same principles for the benefit of the rural community (Ward and McKillop). The movement quickly spread and established in both Germany and Italy. Evidence of Credit Union activity was also found in Heddesdorf, Germany in 1869 (Jones, 1999), cited by Ward and McKillop. Alphonse Desjardins becoming the key pioneer of the movement in Canada also assisted in the initial set up of the movement in the US in 1909 in New Hampshire (CUNA, 2005).

Credit unions have been and remain an important object for research for many years. Ward and McKillop classify credit union researchers into two differing schools of thought. The first group of researchers, who were chiefly influenced by studies done by Robotka (1947) and Phillips (1953) linking co-operative functioning to economic relationships between the cooperative and its members, link credit union objective function to following some form of classical based economic models. The second school of thought suggests that the classic co-operative principles underlie the key objectives of credit unions using some form of member benefit measurement to explain the behavior of credit unions. Ferguson and McKillop (1997), cited by Ward and McKillop, outline credit unions' main objective as being the promotion of thrift that is directed at fulfilling human and social needs, stating that credit unions are not formed to make profits, but rather to maximize the benefit to their members (self-help).

Their links to cooperative movement principles are evidenced within their regulatory framework, their trade association rules and from definitions that have been coined by many researchers who have studied this unique financial institution. The strong link to cooperative ethos can be deduced from the definition coined by Barron (1992), cited again by Ward and McKillop. He defined credit unions being: "constituted as democratic organizations, controlled by their members based on the principle of one member, one vote".

Credit unions are not only different to other financial institutions but also quite different to the normal form of cooerative (Ward and McKillop). They collect savings from members by issuing shares, and use these funds to make loans to the members.

The main difference between credit unions and other cooperatives is that cooperatives either purchase from external entities for the members, or sell to external entities for the members, whereas the users, management, and benefactors of credit unions can only be its members. All transactions are effected for members by members, no external party can transact with credit union (Ward and McKillop). The unique ownership status of credit unions (member run, owned and used) and the above mentioned reasons led Croteau (1963), cited by Ward and McKillop, to describe credit unions as being the ***purest form of cooperative.***

Being cooperative entities, credit unions do not exist to make profits rather to maximize the benefit to their members. Croteau (1963) in line with Ferguson and McKillop (1997), cited by Ward and McKillop, described these main benefits as being the attainment of the economic and social goals of the members. The main vehicle used by credit unions to increase social goals is education/advise on members' financial affairs.

USDA MAP Agricultural Credit Club Program

It was mentioned earlier that agricultural sector is considered one of the most risky areas and Armenian commercial banks are not willing to invest much in this area or if they do provide loans, the collateral requirements are so high that the majority of farmers in the rural areas cannot meet them.

To solve the problem USDA MAP decided to start a loan program where a group of farmers from the same community or village, involved in the same type of activity would be gathered, and connected to USDA MAP Strategic Loan program or USDA MAP collaborating agribusinesses. The loan program was launched in 1998 and aimed at assisting the farmers directly. The program started as Women in Rural Development and then gradually evolved to the program where both men and women farmers are involved.

In just six months, it was decided to expand the program. The idea of this group-lending program was very unique and had no analogues in Armenia: non-interest, collateral free loans with the concept of saving money. Thus Program was renamed to Agriculture Credit Clubs and was tied to USDA MAP assisted processing companies, associations and cooperatives, as a result opening the program to both women and men (Sarukhanyan et al. 2002).

This is not a grant and it is not a loan. This equity investment allows a club to begin operations. USDA MAP expects no return on its equity investment, but may remove its equity at any time the club begins to lose its principal or if the club is failing to grow its own equity. USDA does not agree to leave its equity in the club in perpetuity.

Loan applications will be generated from among members of the club. The club will determine eligibility requirements. USDA suggests no more than 12-15 members in the first year of operation. All of the club members will serve as the loan committee for reviewing loan applications. Loan applications should be accompanied by a business plan that can serve as a basis of review by the club members. USDA will provide technical assistance in developing business plans and in conducting club activities such as procedures for loan review and other business activities of the club.

The goal of the club is to make production loans that can be repaid in one year or less. Investment in buildings is not a function of the club. Investment in equipment is discouraged. Leasing of equipment is encouraged if such equipment is necessary for the business plan. Production loans are to be used for input supplies, services and labor required for a production process. Family members cannot be hired. They must be paid from profits of the production activity. Repayment of the loan principal must always have the first claim from profits generated from production.

To facilitate the loan program, three accounts must be established at a local bank. Account one is the USDA Credit Line. Account two is the Refundable Fund of the Credit Club. Account three is the Risk Reserve Fund of the Credit Club (Sarukhanyan et al. 2002).

Members of the Credit Club make membership payments to the above-mentioned accounts. Each Club determines for itself the amount of the membership fee, but up to this point there was unanimously set an amount of membership payments being 15 percent annually from the loan received. **These payments belong to the club and each member of the club and upon any member's quitting from the club or club termination, the members have the right to receive all the amount of their membership payments provided that the club members have no debt against the club.** The program is continuous and upon repayment every club receives a new loan and starts a new cycle.

Regulatory and Legal Framework

According to Legislation of RA "Credit Club" as a type of legal entity did not exist, so there came a need to incorporate it in the law, thus the need of the separate law on Credit Clubs became vivid.

A group of six parliament members were sent to United States to get acquainted with the Farm Credit System and Credit Unions, as well as to laws and legal acts regulating the field. While in the US the law was drafted, number of US and European example documents were brought back with the purpose of adjusting them to the legal field of the Republic of Armenia.

It took two years and in April 2002 the law was finally passed and ratified by the President of RA. This law regulates the status of agricultural credit clubs and the legal relations connected to their activities, determines club formation, membership, governing principles, obligatory requirements and conditions on involving resources and providing credit, insurance and other services to club members, as well as regulating, controlling and reporting procedures.

The law defines the legal status of Clubs as a volunteer unit with status of legal entity created for mutual financial assistance and is based on the membership of individuals conducting agricultural activities.

The Club is a non-profit, non-commercial organization that:

a. Provides members with services of mutual financial assistance that are not subject of entrepreneurial activity and are implemented on behalf of all members and through their subsidiary risks.
b. Does not recognize the provision of loans from funds (Reserve) that are the ownership of member-clubs of the same union, formation of centralized reserve funds aimed at providing mutual financial assistance to the members of clubs and other financial services as entrepreneurial activities.

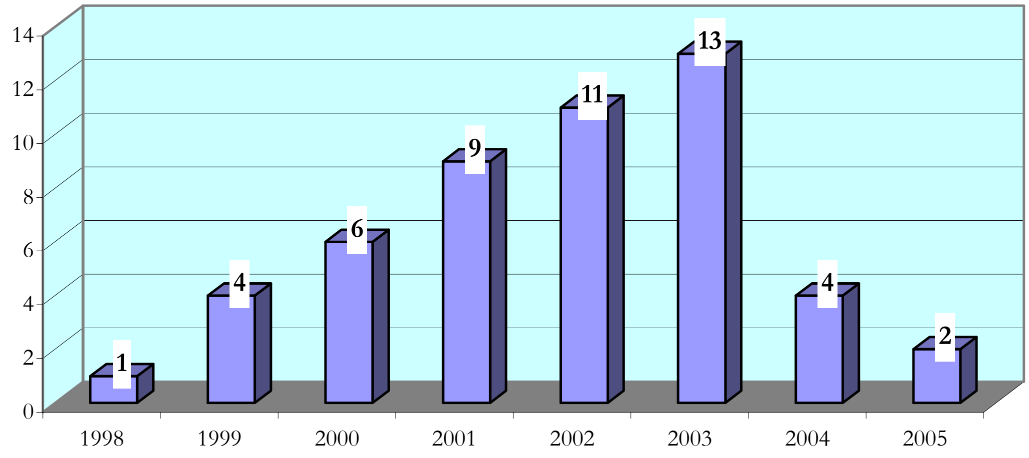
The Club can be established according to the legal status of non-commercial cooperative or union of legal entities.

The great advantage that the law has granted to the Credit Clubs is the possibility to target other sources of credit and apply to different donors for obtaining funds. The Club can involve loan funds only from grants granted by Foundation of clubs, Clubs' Union, as well as international organizations, state and community budgets.

Still, there are many articles that need considerable improvement and amendment. But, one can't diminish the importance of the fact that the first law regulating Credit Clubs, being the first legal entity in their type has been passed. Now the clubs can be registered, passing the usual process as all other legal entities, obtain the stamp and tax code and start the operations on a legal basis.

Credit Clubs can also form Unions of Credit Clubs and a Foundation, which will give them a chance to participate in the decision making process, raise their voice and hopefully become a significant force which can influence the agricultural policy of the country.

Figure 2. The Number of Credit Clubs Established by USDA MAP.



Source: USDA MAP, 2005.

Currently USDA MAP has 50 Credit Clubs in all 10 marzes (provinces) of the Republic of Armenia, and is cooperating with 882 farmer-members of Credit Clubs and benefiting around 3,500 families. Total loan portfolio is so far 1.5 million USD and Credit Clubs' investments are so far $508,585.

Women Credit Clubs

As it was mentioned before, the Agricultural Credit Club program was started as Women in Rural Development. Significant attention was paid to gender component, and Credit Club program started to establish women credit clubs.

Gyumri Production Credit Club being the first women credit club, operates currently and is considered to be the success story of the program. Regardless of number of problems: management (president resigned), non-repayment (one of the members left for Russia without repaying the loans and members repaid instead of that lady) club is considered to be one of the strongest, always operates as a team, ideas of trust and collaboration are put on first place. Women of Gyumri Credit Club are the ones who besides obligatory membership payment, decided to make one more $30 each one time-payment to their fund, thus trying to secure the loans. After one case of non-repayment club has also started to take collateral, something never done by any club, regardless of performance. Gyumri Women Credit Club is also the only one that decided to involve men and currently the club has two men members. The club is involved in production of canned products, bakery, agricultural trading and etc.

Second women credit club was established in May 2001 in Oshakan, Aragatsotn region, women involved in dried fruit production. Here besides usual dried fruit variety women are constantly working on developing new products, such as dried green tomatoes, sweets from squash, fruit truffles from mixed peaches and plums. After 2 years of collaboration with the USDA MAP, Oshakan Credit Club recommended to establish another women credit club in Tsakhkahovit village, in the same region. Women in this club are involved in milk production.

Agriculture Credit Club Program collaborates with number of local and international NGOs implementing women development programs.

Gender Statistics of Credit Clubs

Out of 50 Credit Clubs 6 credit clubs are Women Credit clubs with 96 members. Altogether there are 190 women-members (22%) in the credit clubs. Statistics show that women are mainly the accountants of the club, however there is one women-president. Women credit clubs have excellent performance rate, thus it is planned to increase the number of women credit clubs, try to involve refugee groups and women from remote areas. One potential credit club is for women in Balahovit village, refugees producing wine from berries.

The Credit Club Survey

Methodology

The research is based on **surveys and interviews**. The authors conducted **Person-Administered Surveys** among credit club member farmers who have had an experience in getting agricultural credits from credit clubs. The **Sampling plan** was developed according to **Cost Basis Approach**, using the **Random and Proportional Sampling Statistical Methods**.

The survey contained questions on farmer attitudes, beliefs and perceptions, performance evaluation and intention to stay with credit club, questions measuring the familiarity with and understanding the concept of credit club. A series of choices ranging from “very well” or “agree” to “very bad” or “disagree” were presented to the member respondents.

Descriptive statistics of the survey are also presented. The collected data is analyzed using frequencies, cross tabulations and Likert-type scale analysis. A total of 55 credit club members are surveyed representing around 16 credit clubs from 9 provinces of Armenia.

The Results

Descriptive Statistics

In order to describe the basic features of collected data the descriptive statistics are used in a study. Respondents’ profiles are analyzed on the basis of age, gender and education (See Table 8,9,10). According to the analysis, 78% of the respondents are males, and 63% lie in the 36-50 age group. A great portion of respondents is very well educated. Around 56% have university degrees, 15% have technical college degrees and the rest have secondary school education. About 30% of the respondents are fruits and vegetables producers, 26% grow crops, another 26% use the loans for dairy production, 15% for livestock and only 3% use the loan for some small business activities: bakery, dried fruits, trade, etc.

Table 8. Gender of Respondents.

Gender	Percent
Female	77.8
Male	22.2

Source: Survey Data.

Table 9. Age Categories.

Age category	Percent
21-35	11.1
36-50	63.0
Over 51	25.9

Source: Survey Data.

Table 10. Level of Education.

Education level	Percent
No education	0.0
Secondary	29.6
College/Technical	14.8
University	55.6

Source: Survey Data.

Approximately 45% of the respondents were not familiar with the concept of credit club/union before, however 55% were familiar or knew about the credit clubs/unions. The analysis revealed that the older respondents and those with university degrees were more familiar before with the concept of credit club/union, while younger respondents (21-35) were the least familiar.

Membership Status and Commitment

On average the surveyed credit clubs have 17 members. However 33% have only 12 members and 18% have 19 members. Around 52% of the clubs increased the number of members since the beginning. Of the surveyed club members, 96% state that the objective they became credit club member is to get assured financing for their agricultural activities. Only 4% say that the objective was to get loans with specific interest rate. Around 93% of the respondents realize that the club is a financial or credit cooperative, although 7% think that the credit club is a kind of "bank".

Of the club members surveyed, 93% regard the activities and operation of their credit clubs as successful. It's obvious that credit clubs are building a reputation as a valuable community based resource. **Seventy four percent would seek another credit club if their club would cease operation**. Only 18% of the respondents stated that the current financing from the club is not sufficient for their activities and they borrow from banks in parallel. Around 82% of the members surveyed do not get loans from banks. Almost 96% of current members intend to stay with the credit club for another two years. Basically all respondents consider themselves as full members of the credit clubs. Around 41% evaluate the overall activities and operation of the clubs to be excellent and 48% - well.

The Likert Scale Analysis

A popular technique for obtaining information on human knowledge, attitudes, and behavioral preferences is the inclusion of Likert-type scales in survey questionnaires (Dakurah et al. 2005). Five choices, ranging from "agree or very important" to "disagree or very unimportant" are scored "1" to "5". The Likert 5-point scale indicates that the higher is the number, the higher is the agreement or importance of an attribute or belief.
The following section describes the perception and beliefs of the performance of the credit clubs using Likert scale (See Table 11).

Table 11. Respondents' Perception of their Credit Clubs' Performance.

	Performance Measure (%)				
	Disagree	Slightly Disagree	Indifferent / Don't Know	Slightly Agree	Agree
The Club provides loans with affordable interest rates?	-	-	-	37.0	63.0
The members easily get loans	-	-	-	25.9	74.1
The Club director has needed knowledge and experience	-	18.5	3.7	33.3	44.4
The members are adequately informed about the management's plans and decisions.	-	11.1	3.7	51.9	33.3
The Club offers member trainings and consulting	-	18.5	-	59.3	22.2
The Club encourages for new member recruitments	7.4	11.1	7.4	55.6	18.5
Encourages members to participate in the meetings	-	-	-	37.0	63.0
Includes members in the decision - making	-	-	-	37.0	63.0
Provides fair and equal voting procedures	-	-	-	11.1	88.9
Fosters the economic development in general	-	3.7	3.7	63.0	29.6
Conducts ethical business practices	-	-	3.7	59.3	37.0

Source: Survey Data.

The table shows that in general the members have good evaluative performance to their credit clubs. The respondents agree that their club is conducting appropriate member commitment related activities. The majority of members totally agree that it's very easy to get loans from the club, the club encourages members to attend at meetings, implements fair and equal voting, and includes members in decision-making. Respondents provided very good performance evaluation related to ethical business practices. However, always there is a room for improvement. Around 18.5% slightly disagree that the Club director has needed knowledge and experience. Again some 18.5% of the respondents slightly disagree that the Club offers member trainings, seminars and consulting. Around 7.4% disagree and 11.1% slightly disagree to the fact that the Club encourages new member recruitments. By the way, many members are willing their clubs to increase the number of members, which will enable them to borrow more and save more money for the club. The majority of the respondents would like to receive long-term loans from the Club. They think that for agricultural activities the loan with a maturity of 1 year is not enough. They also mentioned that it would be useful if the Club management conduct or organize seminars and trainings related to business plan writing, accounting and financial management, etc.

Summary and Conclusions

The study reveals the rural credit and finance situation and challenges in Armenian agriculture with special emphasis on the development of the specialized credit institutions, particularly credit cooperatives.

Several surveys were carried out aiming at analyzing the rural finance situation in Armenia (UNDP, USDA). In one survey (USDA) thirty-five percent of the respondents stated that the major constraint to financing is the collateral requirements, however 18% of households mentioned that access to credits is a principle constraint. In another survey (UNDP) 20,7 percent indicated that they had no financial means for cultivation and therefore left fallow part of their land or rented it out.

The vast majority of Armenian banks refrain from financing agriculture due to the high risk associated with the sector. The only bank that is having a serious share in lending to the agricultural sector is the ACBA Bank, which in 2004 claimed to have more than 65 percent of the total commercial bank portfolio in agriculture. This seems to be a very good indicator, but the overall level is problematically low, and it is no surprise that the ACBA's agricultural loan portfolio was only 8.8 million USD. Other banks that do some lending to Armenian agriculture are assisted by the international programs and donors.

There are many problems in land reform issues that inhibit the development of rural finance sector. The land reform is still incomplete. There is statistical evidence that land market emerged already, but still land is hardly used as a collateral. The problem of collateral as a barrier to credit remains significant in Armenian agricultural sector. Banks require up to 200% of collateral level and require residential property in urban areas. Even farmers willing to pay higher interest rates may not have enough assets to collateralize the amount of loan they need.

One of the major problems inhibiting the development of rural finance is the unclear role of government. In Armenia the role of government in contributing to the development of the agriculture credit markets is relatively low. The government should create an appropriate climate for the formation of the specialized agricultural credit institutions, which are widespread in Western European countries.

The role of USDA Marketing Assistance Project as a third – party facilitator in the development Armenian agriculture has been and remains significant. Through a package of marketing, technical and financial assistance USDA MAP aimed at increasing rural incomes, creating jobs and raising the standard of living of rural communities.

One of the most successful financial assistance projects introduced in Armenia by the USDA is the creation of “Credit Clubs”. The concept of US Credit Unions was used as a keystone for launching the Credit Club program. USDA MAP invests the initial capital, expecting no return on its equity; members make membership payments to their own fund, thus building own capital for the future.

Ninety three percent of the respondents regard the activities and operation of their credit clubs as successful. It’s obvious that credit clubs are building a reputation as a valuable community based resource. Seventy four percent would seek another credit club if their club would cease operation. Only 18% of the respondents stated that the current financing from the club is not sufficient for their activities and they borrow from banks in parallel. Around 82% of the respondents do not get loans from banks, they use only the club’s financing. Almost 96% of current members intend to stay with the credit club for another two years. Basically all respondents consider themselves as full members of the credit clubs. Around 41% evaluate the overall activities and operation of the clubs to be excellent and 48% - well.

The majority of members totally agree that it's very easy to get loans from the club, the club encourages members to attend at meetings, implements fair and equal voting, and includes members in decision-making. Respondents provided very good performance evaluation related to ethical business practices.

Long term recommended plan is to help Credit Clubs to form Unions of Credit Clubs and finally Foundation of ACCs, which will give them a chance to participate in the decision making process, raise their voice and hopefully become a significant force which can influence the agricultural policy of the country.

Transition from USDA MAP to CARD

In March 31, 2005 USDA MAP has closed its activities and new organization Center for Agribusiness and Rural Development (CARD) was opened. CARD has inherited the programs of USDA MAP as well as plans to launch new initiatives. CARD has a vision to become a prime service provider in Caucasus to advance sustainable agriculture and agribusinesses so they compete effectively in the marketplace.

The mission of the organization is to assist farmers and agribusinesses in the production and marketing of food and related products to increase incomes and create jobs leading to sustainable livelihoods for rural populations. CARD offers a complete and integrated package of agricultural development services, assistance involves marketing, rural development and financial services.

CARD Credit Department plans to continue working with Agriculture Credit Clubs, develop and expand current ones as well as establish new credit clubs.

References

Barron, D.N. 1992. *Credit Unions: Density-Dependent Evolution*. Pages 137-160.

Bezemer D. J., Lerman Z. 2003. *Rural Livelihoods in Armenia*. The Hebrew University of Jerusalem. The Center for Agricultural Economic Research. Discussion Paper No. 4.03.

Berthoud, R., Hinton, T. 1989. *Credit Unions in the United Kingdom*. Policy Studies Institute. Printer Publishers Limited (UK).

CBA, 2004. Annual Report (in Armenian). *Credit Investments and its Distribution of the Commercial Banks Operating in Armenia*.

CBA, 2004. Annual Report. Presented to the Parliament (in Armenian). http://www.cba.am/hrat/ann_2004/ann_01.pdf

Cocks J. 2003. *External Facilitation, Public Agencies, and Market Development in the Armenian Goat Industry: The Case of the USDA Marketing Assistance Project*. Unpublished MS Thesis, University of Illinois at Urbana-Champaign.

Croteau, J.T. 1963. *The Economics of the Credit Union. Wayne State University Press*, Detroit.

Credit Union National Association. 2005. *Desjardins brings the credit union to Canada*. Web page accessed at http://www.creditunion.coop/history/canada.html

Dakurah H.A., Goddard E., Osuteye N. 2005. *Attitudes Towards and Satisfaction with Credit Unions in Alberta: A Regression and Scale Analysis*. Paper presented at the Canadian Agricultural Economics Association Annual Meeting, San Francisco, CA, July 6-8, 2005.

Dries L., Swinnen J. 2002. *Finance, Investments and Restructuring in Polish Agriculture*. Working Paper 2002/1. Research Group on Food Policy, Transition & Development. Katholieke Universiteit Leuven.

Fairbairn B. 1994. *The Meaning on Rochdale: The Rochdale Pioneers and the Cooperative Principles*. Occasional Paper Series, Centre for the Study of Co-operatives, University of Saskatchewan.

Ferguson, C., McKillop D.G. 1997. *The Strategic Development of Credit Unions*. Chichester, John Wiley & Sons Limited, 231 pages.

Gow H., Swinnen J., 2001. *Private Enforcement Capital and Contract Enforcement in Transition Economies*. AJAE 83 (3), August 2001, 686-690.

International Cooperative Alliance (ICA). 1995. ICA News, No. 5/6, 1995. Web pages accessed at http://www.ica.coop/ica/info/enprinciples.html

Kyureghian G., Zohrabyan T., 2005. *The Role of SME Sector in Post-Soviet Armenian Economy*. Prepared for the IAMA Annual World Food and Agribusiness Forum and Symposium, July 2005, Chicago, USA.

Lerman Z., Mirzakhanyan A., Lundell M., Asatryan P., and Kakosyan A., 1999. *Armenia's Private Agriculture: 1998 Survey of family farms*. ECSSD working paper No. 17.

Matosyan A., Harmon H., 2003. *Market Opportunities for Armenian Agribusiness Products in The Gulf States Markets of UAE, Bahrain and Kuwait.* Armenian International Policy Research Group. Working Paper No. 03/04.

Ministry of Agriculture, 2002. *A Strategy for Sustainable Agricultural Development*. Prepared with the support of the Food and Agriculture Organization of the United Nations within the framework of TCP/ARM/0065.

Ministry of Agriculture, 2004. *A Strategy for Sustainable Agricultural Development.* Consistent with the Government program on "Poverty Reduction Strategy Paper."

MEDI 2003. Armenia Microenterprise Development Initiative. *Assessment of the Opportunities for Banks to Enter the MSE Market.* Submitted by: Chemonics International Inc. Crimson Capital Corp. Contract No. 111-C-03-00048-00.

NSS, 2005. *The Socio-Economic Situation of the Republic of Armenia in Jan-March 2005.*

NSS, 2004. *The Socio-Economic Situation of the Republic of Armenia in Jan-Dec 2004.*

NSS, 2004. *Statistical Yearbook of Armenia.*

OECD, 2001, *Agricultural Finance and Credit Infrastructure in Transition Economies.* OECD Center for Cooperation with Non-members, Paris.

Pederson G., Khitarishvili T., 1997. C*hallenges of Agricultural and Rural Finance in CEE, NIS and Baltic Countries.* Center for International Food and Agricultural Policy. University of Minnesota.

Sarukhanyan R., Vardanyan F., Abrahamyan L., Alexandryan M., Vanyan A. (2002). *Innovative Approaches to Farm Enterprise Development, Cooperation and Partnership Arrangements for Improved Livelihood in Armenia.* FAO Workshop, Prague, Czech Republic.

Spoor M., 2004. *Land Reform, Rural Poverty and Inequality: A Pro-poor Approach to Land Polices.* UNDP Armenia White Paper.

State Cadastre Committee of the Republic of Armenia, 2004. *Agricultural Land Market in 2004.* Mimeo. Yerevan.

State Cadastre Committee of the Republic of Armenia, 2003. *Agricultural Land Market in 2003.* Mimeo. Yerevan

Swinnen J. 2005. *When the Market Comes to You -- or Not. The Dynamics of Vertical Coordination in Agri-food Chain in Transition.* Final Report of the World Bank (ECSSD) ESW "Dynamics of Vertical Coordination in ECA Agri-food Chains: Implications for Policy and Bank Operations" (EW-P084034-ESW-BB).

Swinnen J., Gow H., 1997. *Agricultural Credit Problems and Policies During the Transition to a Market Economy in Central and Eastern Europe.* Policy Research Group, Department of Agricultural Economics, Katholieke Universiteit Leuven. Working Paper No. 6.

USDA MAP, 2005. *The USDA, 12 Years Story of Partnership with Armenia.* Written by Bill Yerisyan, compiled by Paul Sommers. Gasprint Publishing House.

Ward Ann-Marie, McKillop D. *The relationship between credit union objects and cooerative philosophies.* Working paper, Belfast, Ireland: School of Management and Economics, Queens University Belfast. (http://www.creditunionresearch.com/uploads/workingpaper1.PDF)

Ward Ann-Marie, McKillop D. *Emergence of the Credit Union Movement in the United Kingdom: comparison with the United States and The Republic of Ireland.* Working paper, Belfast, Ireland: School of Management and Economics, Queens University Belfast. (http://www.creditunionresearch.com/uploads/Workingpaper2.PDF)

White J., Gorton M., 2004. *Vertical Coordination in Transition Countries: A comparative study of agri-food chains in Moldova, Armenia, Georgia, Russia, Ukraine.* Report prepared for the World Bank (ECSSD) project on “Vertical Coordination in ECA Agrifood Chains as an Engine of Private Sector Development: Implications for Policy and Bank Operations” (Contract No. 7615040/7620016).