The Role of Specialized Agricultural Credit Institutions in the Development of the Rural Finance Sector of Armenia:
Case of Credit Clubs

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Poster paper prepared for presentation at the International Association of Agricultural Economists Conference, Gold Coast, Australia, August 12-18, 2006

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Abstract

The paper aims at studying the challenges of agricultural 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 in Armenia. The study identifies the attitudes and perceptions of member farmers relating to the level of interest rates and access to credit. The findings provided clear indications of the challenges 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 have been conducted among credit club members to identify and measure the benefits of such a rural credit cooperative initiative. Based on findings, certain recommendations have been proposed regarding the rural finance and credit mechanisms.

JEL classification: Q13, Q14

Keywords: credit clubs, rural finance, agricultural credit, cooperatives
1. 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).

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 and 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 and 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 and Swinnen, 1997). The perception of high interest rates means first of all the availability of credits at a price (Pederson and 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.

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 and 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 and Swinnen, 1997).

2. Armenia in Transition

Armenia is a landlocked and mountainous country covering an area of 29,800 km². 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).

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. The inherited governmental and legal infrastructure was seriously flawed, plagued with overwhelming levels of bureaucracy, corruption and nepotism (Kyureghian and 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 privatize 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. 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 and Bezemer, 2003).

3. Agricultural Land Market in Armenia

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).

<table>
<thead>
<tr>
<th>Table 1: Number and Acreage of Peasant Farms (2000-2004)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Peasant Farms, Units</td>
</tr>
<tr>
<td>Land Area of Peasant Farms (x 1000 Ha)</td>
</tr>
<tr>
<td>Average Size Peasant Farms (Ha)</td>
</tr>
<tr>
<td>Agricultural Land</td>
</tr>
<tr>
<td>Arable Land</td>
</tr>
<tr>
<td>Perennial Grass</td>
</tr>
<tr>
<td>Fallow Land</td>
</tr>
<tr>
<td>Hay Land</td>
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<tr>
<td>Pasture</td>
</tr>
</tbody>
</table>


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.

Reports provided by the State Cadastre Committee show that the land sale and lease markets are developing in Armenia. 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 (SCC, 2004). 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.
4. Agricultural Credit and Rural Finance in Armenia

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 2). 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 2: The agricultural credits of the commercial banks operating in Armenia

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Maturity of</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 year and</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>more</td>
<td></td>
</tr>
<tr>
<td>Total Credits, Leasing</td>
<td>83,827</td>
<td>36,179</td>
<td>101,820</td>
</tr>
<tr>
<td>and Factoring to Residents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of which Industry Total</td>
<td>32,191</td>
<td>16,059</td>
<td>29,771</td>
</tr>
<tr>
<td>Food Industry</td>
<td>10,122</td>
<td>5,435</td>
<td>10,438</td>
</tr>
<tr>
<td>% in Industry Total</td>
<td>31.4%</td>
<td>33.8%</td>
<td>35.1%</td>
</tr>
<tr>
<td>Agriculture Total</td>
<td>7,787</td>
<td>3,713</td>
<td>7,709</td>
</tr>
<tr>
<td>Percentage in Total</td>
<td>9.3%</td>
<td>10.3%</td>
<td>7.6%</td>
</tr>
</tbody>
</table>


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. 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 (ACBA Annual Report, 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 takes the following as collateral: immovable property-land, buildings, apartments, houses, fixed assets, working capital, vehicles, precious metal, livestock, electronics,
furniture, etc (MEDI, 2003). Other banks that do some lending to Armenian agriculture are assisted by the international programs and donors (See Table 3).

| Table 3. Loan Products of Banks Under International Agricultural Development Programs. |
|---------------------------------|-------------------|-----------|----------|---------|
| **Bank**                        | **Product**              | **Min. size** | **Max. size** | **Term** |
| 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 |


As of December 31, 2004 seven banks operating in Armenia serviced the loan programs of the following international and local organizations: KfW, 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 “Law on Credit Organizations” (approved in 2002, which includes credit and savings unions, leasing and factoring companies, and universal non-bank financial institutions-NBFI).
<table>
<thead>
<tr>
<th>NBFI</th>
<th>Product</th>
<th>Min. size</th>
<th>Max. size</th>
<th>Term</th>
<th>Interest</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECLOF (Ecumenical Church Loan Fund)</td>
<td>Provides group guaranteed agricultural loans</td>
<td>$500</td>
<td>Depends on business plan</td>
<td>&lt; 1 year</td>
<td>12%</td>
<td>At least 3 farmers needed in the group</td>
</tr>
<tr>
<td>ANIV</td>
<td>Provides technical assistance and loans to rural enterprises</td>
<td>$2,000</td>
<td>$15,000</td>
<td>&lt; 3 years</td>
<td>12% in USD, 14% in AMD</td>
<td>Collateral should be 200% of the loan. Takes immovable and movable property.</td>
</tr>
<tr>
<td>AREGAK</td>
<td>Provides agricultural loans to Women Groups</td>
<td>$100</td>
<td>Depends on performance</td>
<td>&lt; 1 year</td>
<td>2% monthly</td>
<td>After every successful phase the loan needed will be increased by 40%. Interest is paid monthly. Collateral free.</td>
</tr>
<tr>
<td>KAMURJ</td>
<td>Group Guaranteed Agricultural Loans</td>
<td>300,000 AMD</td>
<td>600,000 AMD</td>
<td>&lt; 1 year</td>
<td>2.7% monthly</td>
<td>Min. 10 farmers in the group from the same village. Interest should be paid monthly.</td>
</tr>
<tr>
<td>Izmirlyan-Eurasia Universal Credit Organization</td>
<td>Agricultural Loans (legal entities only)</td>
<td>$10,000</td>
<td>$125,000</td>
<td>&lt; 4 years</td>
<td>15%</td>
<td>Collateral should be 150%-200% of the loan and immovable and movable property.</td>
</tr>
</tbody>
</table>

Source: Authors' personal interviews.

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 4).

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 LLC** 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 agro-leasing 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).

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

5. 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. 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.

6. Agricultural Credit Club Program

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. The program started as Women in Rural Development and then gradually evolved to the program where both men and women farmers are involved.

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. 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.

The activities of the credit clubs are regulated by the Law on Credit Organizations passed and ratified by the President of the RA in April 2002. 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.

Currently USDA MAP has 50 Credit Clubs in all 10 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 (USDA MAP, 2005).
6.2 Women Credit Clubs

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 trade, etc.

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-refugees producing wine from berries.

7. The Credit Club Survey

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.

7.1 The Results

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. 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. 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.

7.2 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 club members surveyed, 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.

8. Summary and Conclusions

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.

The vast majority of Armenian banks refrain from financing agriculture due to the high risk associated with the sector. 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 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.
Ninety three percent of the credit club members surveyed 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. 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.

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.
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http://www.cba.am/hrat/ann_2004/ann_01.pdf


