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## **Special agricultural microfinance organizations - Macedonian Experience**

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# Special Agricultural Microfinance Organizations - Macedonian Experience -

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**Abstract:** In countries where agriculture has substantial role in generating domestic product, sustainable microfinance can seriously increase economic activities and hence rural development. It is well known that agriculture is perceived as specific and risky to be financed by banks. Therefore, creating a specific sustainable microfinance (sometimes state owned) institutions is key element in enhancing rural and agricultural activities. These organizations together with banks and other small-scale financial institutions operating in close collaboration with the Government have a significant role in accelerating economic welfare of farmers and rural poor. This study tends to emphasize the importance of creating special microfinance institutions targeted towards strategic economic sectors such agriculture, with a focus on Agricultural Credit Discount Fund - a separate unit within the Macedonian Bank for Development Promotion that administers a credit line created to support Macedonian agribusiness. The ACDF's 'modus operandi' is a guideline to every similar potential organization, as it creates prerequisites for easier access to microloans and increased income to its beneficiaries. The outstanding portfolio performance, fulfillment of the objectives and good impact on stakeholders is strong confirmation to this claim.

**Keywords:** sustainable microfinance, agriculture, high risk, economic welfare, rural development, special institutions, Agricultural Credit Discount Fund, microloans, agribusiness

**JEL Codes:** E5, G2, H8 and Q1

## 1. Introduction

Micro-lending in agriculture is commonly avoided by banks. The agriculture is exposed to specific risks, not immanent to other economic sectors: weather conditions, poor profitability, high transaction costs, lack of collateral etc. Operating in high risk environment with narrow margin is not a 'dream come true' for profit-based financial institutions. Every Government tends to overcome this vacuum in supporting micro-beneficiaries, mainly farmers and rural poor.

In Macedonia, the link between supply and demand for micro-loans was established in 2002 by creating the Agricultural Credit Discount Fund (ACDF) within the Ministry of Finance. Its primary purpose was financial administration of Agricultural Financial Services Project (AFSP) or Second Loan Intervention of the International Fund for Agricultural Development (IFAD) in Macedonia (IFAD Loan 545-MK or IFAD II). The Loan amounted SDR 6.2 m. of which SDR 5.5 m. i.e. the Incremental Credit Fund was for on-lending to qualifying target group borrowers.<sup>i</sup> As a result of ACDF's increased on-

lending activities, in 2005 Macedonian Government capitalized the Fund with SDR 0.7 m. remained from South and Eastern Regions Rural Rehabilitation Project (SERRRP) or First Loan Intervention of IFAD in Macedonia (IFAD Loan 428-MK or IFAD I), previously administered by a privately owned commercial bank.<sup>ii</sup>

In 2006, the volume of ACDF refinancing operations had rapidly increased, achieving significant portfolio growth, which resulted in overcoming the projections and faster disbursement of the Incremental Credit Fund. At the beginning of 2007, ACDF faced the biggest challenge - insufficient amount of refinancing capital. This had immense consequences on ACDF refinancing operations. Lending volume was reduced in a situation where Participating Financial Institutions (PFIs) finally learnt how to utilize the ACDF services as an instrument of expanding their rural microfinance operations and had ambitious plans to increase their rural outreach.

Fortunately, the Macedonian Government acknowledged the crucial role ACDF has played in



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the process of rural development. It has reviewed the possibilities of identifying additional funds for providing low-interest micro-loans for the agricultural sector, especially having in mind that provision of affordable and at the same time economically viable agricultural micro-loans is a significant element in strengthening the rural economy and reducing poverty in rural areas.<sup>iii</sup> Subsequently, the Government has decided to supplement the existing ACDF funds (from IFAD I and IFAD II sources) with the revolving funds from the two World Bank Private Sector Development Loans (PSDL I<sup>iv</sup> and PSDL II<sup>v</sup>), previously administered by the National Bank of the Republic of Macedonia (NBRM) in order to increase the available funds for further lending to agriculture. Following the Government decision, in November 2007 ACDF has taken over the whole responsibility of administering the PSDL I and PSDL II credit lines net worth EUR 21.2 m.

Due to excellent performance, in 2008 the Government again has decided to enrich the existing ACDF funds (now IFAD I, IFAD II, PSDL I and PSDL II) with the revolving funds from European Investment Bank (EIB) APEX Global Loan, also administered by NBRM at that time.<sup>vi</sup> The transfer meant additional EUR 17.3 m. These three capitalizations resulted on the paramount of its operations at the end of 2008, ACDF revolving fund to be worth EUR 42 m. of which EUR 12 m. liquid funds and EUR 30 m. receivables.

As of mid-2010, ACDF unit has been transferred to the state owned Macedonian Bank for Development Promotion (MBDP).

## 2. Operations

The ACDF credit line is especially targeted to agribusiness, i.e. individual farmers, rural households, agricultural, agro-processing and agro-export SMEs as well as European Instrument for Pre-Accession Rural Development Program (IPARD) beneficiaries. The credit line's main objectives are:

- to create a framework for a sustainable agricultural finance sector within the Macedonian banking system;
- to integrate the smallholder agricultural SMEs and rural population in the banking system, both as depositors and borrowers and
- to reduce the risk to micro-lenders and beneficiaries through institutional and capacity building programs in support of sustainable commercial lending.

ACDF is a discount or refinancing facility. Its refinancing operations are co-financing activities

undertaken by both ACDF and selected PFIs. Twelve privately owned commercial PFIs (ten banks and two saving houses) are utilizing ACDF revolving fund for their agro-lending at the moment. PFIs are eligible to draw down refinancing for a percentage of a sub-loan to qualifying beneficiaries at a rate of no more than 80% that is set by the ACDF. PFIs are required to pre-qualify loans with the ACDF. They pay interest for the discounted amount at a level of only 0.5% annually that serves as a financial incentive for them to expand agricultural and micro-lending activity.

The credit risk in on-lending operations is with the PFIs and there are absolutely none fiscal implications to the state budget. PFIs also provide a portion of the investment capital from their own funds (at least 20% of the loan amount) which is huge incentive for them to insist on-time repayment by their beneficiaries. Beneficiaries are also required to contribute a minimum of 20% to the cost of investment. The contribution is not mandatory to be in financial assets but in assets correlated to the investment credited. PFIs then repay the discounted portion of the sub-loan to the ACDF in constant EUR terms and in accordance with the repayment schedule set for each sub-loan. Individual sub-loans may also be indexed in foreign currency. Each PFI is allowed to apply their own lending policies; collateral requirements, documentation, repayment period, fees, etc. (except for the interest rates) to sub-loans. For example, the operation fees vary between 0.5% and 3% of the loan depending PFI, loan amount, investment type or repayment period.

ACDF refinances a range of credit products defined in three major categories:

- **Primary production** loans (up to EUR 100,000) for investments in primary agricultural production (viticulture, horticulture, floriculture, livestock etc.);
- **Agro-processing** loans (up to EUR 300,000) for investments in agro-processing industry (dairies, mills, wineries, fruit, vegetables and meat processing capacities etc.) and
- **Agro-export** loans (up to EUR 300,000) for investments supporting agro-exports.

The best competitive advantage of this credit line is the interest rate cap for the final beneficiaries as stipulated in the Subsidiary Loan Agreement signed between each PFI and Ministry of Finance. The interest rate is fixed and set to 4% annually (for borrowing through banks) and 6% annually (for borrowing through saving houses) for the first credit category and 5% annually (through banks) and 6.5% annually (through saving houses) for the second and third credit categories. These interest rates are one of

the lowest on Macedonian credit market at the moment.

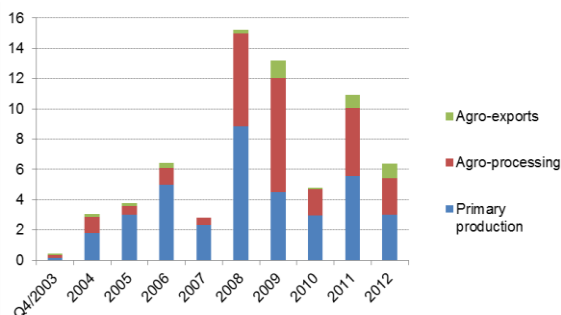
ACDF provides quality micro-lending by continuously promoting it as commercial, not Government subsidized under the circumstances. The ceiling on interest rates lower than actual capital market rates was a voluntary concession by the PFIs in negotiations with the Government. They receive funds from ACDF under much favorable terms than the capital markets regime, which allows them a reasonable margin.

### 3. Performance Indicators<sup>1</sup>

**By Credit Category:** A total of 5,501 loans in amount of EUR 67.0 m. have been approved from ACDF funds between October 2003 and December 2012 (Chart 1).<sup>2</sup> This capital injection into the nation’s rural economy represents a substantial contribution to rural development from a scheme that has been fully operational for only nine full years. The overall amount of loans underestimates the total value of induced investment, since borrowers’ own equity contributions to the associated businesses are not included.

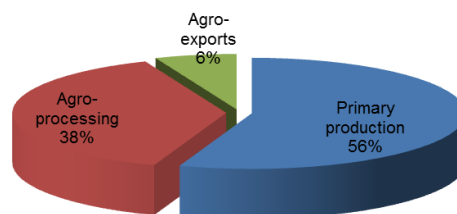
Around 56% of the total credit portfolio (predominantly micro-loans) ended in primary agricultural production, 38% were utilized for investments in agro-processing, while 6% supported agro-export activities (Chart 2). The total portfolio average loan size is EUR 12,184 and the primary agricultural production loan size is even lower – EUR 7,272 which indicates that this Fund is generally oriented towards micro-lending.

**Chart 1: ACDF Loans Disbursement by Years (in millions of EUR)**



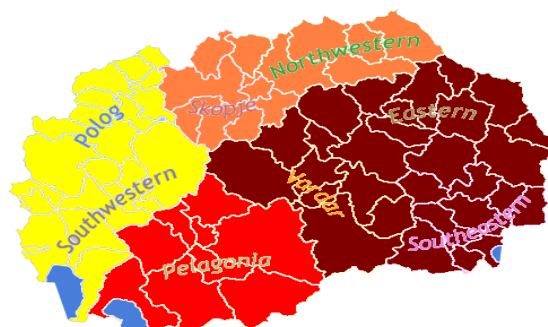
<sup>1</sup> Macedonian Bank for Development Promotion is a sole source of data presented in this subtitle.  
<sup>2</sup> For comparisons and ratios see Appendix at the end of the text.

**Chart 2: ACDF Loans Disbursement by Credit Category as of December 31<sup>st</sup>, 2012**



**By Regional Distribution:** The regional disbursement of the ACDF funds is diverse. On-lending activities are far more intensive in the Southeastern compared to Southwestern statistical region (Map 1).

**Map 1: ACDF Loans Disbursement by Statistical Regions (in millions of EUR)**



In 2009, ACDF unit has analyzed the disturbances in regional lending. The study showed that imbalances in credit demand are as a result of several factors:

- Mentality of the population in statistical regions with lesser lending activities is generally oriented towards friends and family financing (FFF), rather than commercial lending;
- Climate differences between regions cause the significance of agriculture in southern and eastern parts of Macedonia to be stronger with predominant rural, agriculture-based population;
- The northern part of the country is predominantly urban, industrial and service-oriented, rather than agricultural. Three out of four biggest cities are far

north. This causes necessity for additional finance, especially microfinance in agribusiness there to be limited;

- Southwestern and Polog population is traditionally oriented towards mid-term economic immigration abroad. As a result, the remittances sent to these regions are high, hindering the demand for commercial credits.

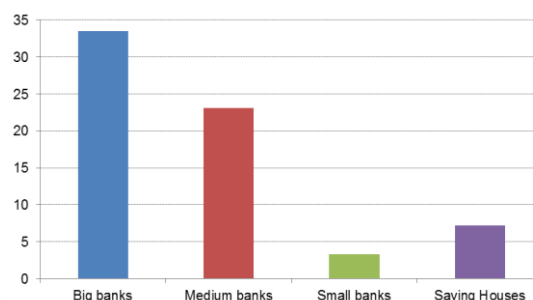
About 22% of the loans have been approved in Southeast and only 5% in Southwest, creating 5 to 1 ratio. What seems to be more interesting is that average loan of Polog region (EUR 31,751) is the highest and the one of Northeast (EUR 7,361) is the lowest (4.3 to 1 ratio). This indicates that economic strength of Polog farmers and agrobusinessmen is 4.3 times stronger than Northeastern, showing the gap in economic performances between regions at the same time. Therefore, the need of micro-loans is predominantly in the Northeastern part of the country.

**By Participating Financial Institutions:**

As said before, the role of PFIs in disbursement ACDF funds is crucial. The beginning of ACDF in 2003 was supported by three banks only, all of them mainly oriented towards SMEs rather than individual farmers. The big breakthrough in micro-lending happened in 2004 when two saving houses were introduced to the Programme. Their flexibility in on-lending activities opened ACDF funds to individual farmers on great cheers by the later. Actually, this was for first time ever small individual agricultural producers to have access to favorable loans on the Macedonian capital market. Finding their own interest in attracting this focus group to their banking operations, several other banks also signed Sub-Loan Agreements with the Ministry of Finance and joined ACDF refinancing activities (two in 2005, two in 2008 and three in 2011). This action dramatically expanded the outreach of ACDF refinancing on a level equal to some smaller and medium Macedonian banks.

Expectedly, big banks have the biggest portion of refinanced loans of EUR 33.5 m. or 50% (Chart 3), followed by medium banks (EUR 23.1 m. or 34%), saving houses (EUR 7.2 m. or 11%) and small banks (EUR 3.3 mil. or 5%).<sup>3</sup> Seeing this chart and considering total assets value compared to ACDF

refinancing, it can be concluded that saving houses are more farmer friendly in lending than small banks and medium banks are more than big banks.



**Chart 3: ACDF Loans Disbursement by PFI Size (in millions of EUR)**

**By Gender:**

ACDF strongly supports equal opportunities in funds availability to beneficiaries. In 2003-2012, exactly 4,557 loans amounting EUR 50.1 m. (75%) were disbursed to male beneficiaries and 944 loans amounting EUR 17.0 m. (25%) were disbursed to women. The average loan size (EUR 10,988 for male and EUR 17.962 for female beneficiaries) indicates that women have “more courage” when deciding to borrow and they perform better when lending and repaying. ACDF is continuously informing PFIs that lending to women borrowers should be prioritized and increased to the satisfactory extent, having in mind that in some cases they are carriers of the households’ rural and agricultural activities.

**By Loan Amount:**

Macedonian primary agricultural production is mainly small and fractious. Therefore, it’s not surprising that a share of 81% of the disbursed loans and a share of 28% of the disbursed amount are micro-loans amounting EUR 10,000 and less (Table 1).

<sup>3</sup> According to NBRM regulations, “a big bank” is considered bank with assets of MKD 15 b. (EUR 244 m.) and over; “a medium bank” is considered bank with assets between MKD 2 b. and MKD 15 b. (EUR 33 m. and EUR 244 m.); and “a small bank” is considered bank with assets of MKD 2 b. (EUR 33 m.) and less.

**Table 1: ACDF Loans Disbursement by Individual Loan Amount as of December 31<sup>st</sup>, 2012**

Individual Loan Amount	Number of Loans	%	Amount (EUR)	%	Average Loan (EUR)
up to 10,000	4,453	81	18,696,869	28	4,199
10,001-50,000	794	15	18,686,462	28	23,535
50,001-100,000	170	3	13,385,146	20	78,736
100,001-200,000	69	1	11,637,907	17	168,665
over 200,000	15	0	4,620,131	7	308,009*
<b>Total</b>	<b>5,501</b>	<b>100</b>	<b>67,026,515</b>	<b>100</b>	<b>12,185</b>

*Note:* The anomaly of higher average loan of EUR 308.009 than maximum limits of EUR 300,000 is due to higher temporary limits of EUR 700,000 for wineries and EUR 500,000 for the rest of agro-processors allowed for working capital procurements in the period 2009-2011, as well as EUR 400,000 for greenhouses in 2011.

It is noticeable that few agribusinesses can sustain credit exposure of over EUR 200,000. Thus, the capacity of borrowing in Macedonian agro-industrial complex is limited on loans between EUR 3,000 and EUR 50,000.

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ACDF unit operations also carry an obligation of analyzing quarterly reports from PFIs considering ACDF loans cumulative repayment rate, portfolio quality, collateral requirements, reasons for rejections with PFIs credit committees and rejection rate.

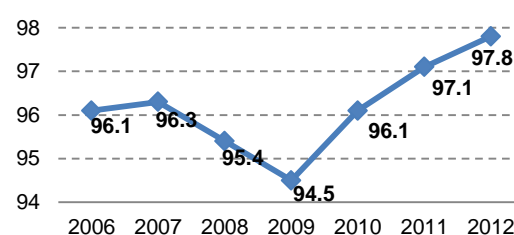
#### Cumulative Repayment Rate:

The full credit risk of all ACDF-refinanced loans is with the PFIs. Their obligation is to fully repay the refinanced principal plus interest back to ACDF revolving fund even in cases when the final borrowers delay their repayments or default. While the credit risk of individual loans is with the PFIs, it is of interest for ACDF to follow-up the actual repayment by clients.

Above all expectations, the cumulative repayment rate of ACDF loans is more than satisfactory. The worst, but still bearable result was noticed in 2009 (94.5% cumulative repayment rate) when global financial crisis sharply stroke nearly everyone including agribusiness itself (*Chart 4*). Fortunately, in 2012 only 2.2% of ACDF loans were in default. This near excellence was partly a result of PFIs' accelerated recovering or writing off after the crisis. Considering that default in whole Macedonian banking sector for 2012 was 10.8%<sup>4</sup>, it is clearly evident that ACDF beneficiaries are far more sustainable and serious

in fulfilling their repayment obligations than the rest of economic operators in the country.

**Chart 4: ACDF Loans Cumulative Repayment Rate (%)**



#### Portfolio Quality:

In addition to cumulative repayment rate, ACDF also analyses the portfolio quality of loans disbursed (Table 2).

<sup>4</sup>NBRM data

**Table 2: ACDF Portfolio Quality Progress (in thousands of EUR)**

Days in Arrears	End of 2008	%	End of 2009	%	End of 2010	%	End of 2011	%	End of 2012	%
Up to 30	16,825	92.4	23,347	81.0	19,803	92.3	20,580	94.8	18,659	94.7
31-180	1,217	6.7	5,151	17.9	932	4.3	746	3.4	675	3.4
181-365	94	0.5	144	0.5	364	1.7	180	0.8	57	0.3
Over 365	71	0.4	179	0.6	356	1.7	199	1.0	302	1.6
<b>Total Outstanding</b>	<b>18,207</b>	<b>100.0</b>	<b>28,821</b>	<b>100.0</b>	<b>21,455</b>	<b>100.0</b>	<b>21,705</b>	<b>100.0</b>	<b>19,693</b>	<b>100.0</b>

As it can be seen, the outstanding portfolio with up to 30 days in arrears varies between 81.0% in 2009 and 94.8% in 2011. This is considered to be highly satisfactory. Namely, due to the specific nature of agriculture and agro-processing industry, up to 30 days delay in micro-lending is not considered risky. Furthermore, it is commonly known that PFIs not always follow the sector's specific inflows and outflows when creating repayment schedules. Therefore, an up to 30 days repayment delay in agribusiness is practically unnoticeable.

The burden of 2009 financial crisis is pretty much evident in the aging portfolio analysis. High percentage of almost 18% of portfolio between 31 and 180 days in arrears in 2009 created a peak of 1.7% nonperforming loans (over 365 days in arrears) in 2010. As a result, the PFIs in 2010 introduced more conservative approach in lending by reducing the outreach and orienting towards more feasible and profitable investment projects. This credit policy caused total outstanding to be decreased by almost EUR 8 m., but also a desirable credit risk reduction. The improvement came in 2011, manifested by a highest percentage of non-risky portfolio up to 30 days in arrears (94.8%) as well as bearable portfolio between 31 and 180 days in arrears (3.4%).

ACDF within its authority is continuously monitoring clients' performances in order to determine whether its funds are used properly and according to the criteria, policy and procedures. As of the end of 2012, ACDF unit has monitored 2,922 beneficiaries and discovered only 60 misuses and fouls, or about 2%. Considering number of clients inspected as well as total number of loans lent, this is a very small portion of misuse indeed. The logical conclusion about ACDF beneficiaries' responsibility, seriousness and honesty in using credit funds is therefore inevitable.

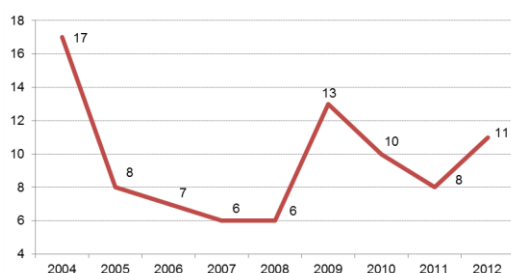
#### **Collateral:**

Since PFIs carry the risk of loans repayment to the Fund, they have full discretion in collateralization according to their own policies and procedures. All available instruments provided by law - tangible collateral (mortgages and pledges) and soft collateral (personal guarantees, cash cover, insurance policies, bills of exchange etc.) are used. Having this in mind, ACDF loans with PFIs were collateralized as following (*Note: Some loans were covered by two or more collateral instruments*).

- 4,103 loans (all of which micro-loans) with personal guarantees (guarantors);
- 1,318 loans with mortgage on housing and production facilities, 725 of which in urban and 593 in rural areas;
- 1,180 loans with bills of exchange or other securities;
- 611 loans with mortgage on agricultural land;
- 360 loans with pledge on tangible assets (equipment, mechanization, herds, vehicles);
- 245 loans with cash cover;
- 26 loans with guarantee funds guarantees and
- 3 loans with insurance policies.

#### **Applications Rejection:**

The decision making for ACDF loan applications is bi-leveled, with the PFIs' loan decision bodies and later with the ACDF Credit Committee. The risk of default requires a specific in-depth analysis of loan applications mainly articulated by both quantitative and qualitative parameters. Unfortunately, sometimes one, several or all of these required performances are not fulfilled by the applicants, creating therefore grounds for rejection.

**Chart 5: Rejection Rate by PFIs Loan Decision Bodies (% at the end of year)**

The cumulative loan applications' rejection analysis as of the end of 2012 indicates that 563 out of 6,364 loan applications received have been rejected by the PFIs' credit committees, which is 8.8% rejection rate. *Chart 5* shows how the rejection rate followed the investment risk anticipated by the banking sector through years. For instance, the country's recovery from 2001 insurgencies and restraints in agricultural lending caused 17% rejection rate in 2004. The global and national economic and financial expansion lowered this rate to 6% in 2007 and 2008, but the opposite tendencies again brought it to 13% in 2009.

The most common reasons for rejection of the loan applications by PFIs' credit committees are presented in *Table 3*. It is noticeable that insufficient collateral is still an "open wound" for potential agricultural investors. Fortunately, compared to previous years PFIs have relaxed their collateral policy as one of the major obstacles in lending in general and they have put bigger emphasis on the businesses themselves.

**Table 3: Reasons for Loan Applications Rejection by PFIs as of December 31<sup>st</sup>, 2012**

Reason	Rejections	%
Insufficient Collateral	193	34
Insufficient Business Volume	111	20
Indebtedness	83	15
Incomplete Documentation	64	11
Cancelation by Applicants	63	11
Potential Misuse	45	8
Other	4	1
<b>Total</b>	<b>563</b>	<b>100</b>

#### 4. Impact On Beneficiaries:

ACDF's most obvious impact on beneficiaries is decrease of rural poverty. The refinancing operation, with over EUR 37 m. invested as micro-loans in primary agricultural production, successfully reached smaller-scale, asset poor households. The outcomes from the regular monitoring and assessment show that these borrowers develop their businesses and become economically stronger and viable with the realized investments.

The ACDF borrowers improved their competitiveness by modernization of equipment and production technologies as well as higher products' quality and value added. Over EUR 17 m. were spent by agro-processors for working capital, mainly from domestic suppliers (individual farmers), who at the end of the day benefited from these lending arrangements and over EUR 8 m. for production equipment and restructuring production techniques in order to keep pace with the modern technologies.

ACDF operations decreased the unemployment rate by engaging labor on farms and agro-processing companies. Individuals are engaged on longer term basis in agriculture, having larger income and feeling more secured. The number of employees in agro-processing companies has permanently risen also. The very poor, including those without agricultural assets, gained access to seasonal employment arising from higher production, enhanced marketing and increased employment requirements for product handling, sorting and packaging at the processor level. Exactly 15,093 jobs were supported by ACDF loans in the analyzed period.

Last, but not least, crucial importance of the ACDF credit line is increased income to beneficiaries. Considering 4% average agricultural BDP growth in the period 2004-2011, the investments in primary agricultural production resulted in total value added of about EUR 12 m. The investments in agro-industry on the other hand resulted in total value added of about EUR 16 m. (considering 8% average agro-industry BDP growth in the same period).

ACDF strategy was recognition of the family farm as core entrepreneurial unit in the emerging market-oriented rural economy in Macedonia. By directing agricultural financial support to such, it was expected not only to improve the standard of living of farm families, but also to impact favorably on other rural poor with no access to agricultural assets. Farmers and other rural entrepreneurs have become increasingly connected to the formal financial sector on a systematic and commercially viable basis. Greater production entailed an increased labor



requirement and contributes to absorbing new entrants to the labor force. Intensification of production has increased the demand for on-farm labor and suppliers of inputs, while increased output offered scope for private investments in processing and trading enterprises, thereby creating further employment opportunity and means to enhance linkages in the rural economy. The appropriateness and success of the ACDF approach can be measured not only in terms of the absolute number and amount of loans refinanced, but also in terms of the wider effects induced among PFIs and the target population.

#### **On Participating Financial Institutions:**

The provision of micro-financial services to the rural and agricultural sector in Macedonia was rather limited until few years ago. The banks' perception of high risks in agricultural lending combined with high transaction costs as well as profits enjoyed in lending to other sectors, inhibited formal financial services' penetration into the small-scale agricultural financial market. Poor loan recovery with several donor-financed rural lending operations compounded bank concern. Most banks had limited experience in dealing with small and medium-scale agricultural producers and their enterprises and few trained staff to deal with rural clientele. In that environment, when the country's banks lent to agriculture, they tent borrowers to be large, commercial farming and agro-processing enterprises with well-established marketing channels for their products.

One of the basic objectives of ACDF was to create a framework for a sustainable agricultural finance sector within the Macedonian banking system, through establishment an agricultural refinancing facility. After ten years of operation, ACDF has undoubtedly achieved it. All PFIs now actively use the ACDF scheme to start their lending operations to small rural clients from their branch offices and have started to compete of clients by offering ACDF-refinanced loans.

The increased competition among PFIs in attracting new clients made the loans more available to individual farmers, i.e. the loan terms (interest rates, repayment periods, collateral requirements, fees etc.) became more favorable. While there was an interest rate cup for ACDF loans, the repayment periods finally followed the specific needs in agriculture. The collateral policy was further relaxed by accepting mortgages on rural housing/production facilities, agricultural land and pledge on agricultural mechanization/equipment. Fees have also been lowered in some cases by more than 50%. This "positive transfer" of appropriate approaches to service delivery and products between banks is

among the key measures originally identified for ACDF success.

ACDF has succeeded in convincing PFIs to notice the financial potential of agriculture and micro-lending. As a result, the PFIs agribusiness credit portfolio has dramatically expanded. In 2009, ACDF unit has conducted a survey asking PFIs about the impact this credit line had on their operations between 2003 and 2008. According to their responses, the results were positively astonishing:

- The share of agricultural credit portfolio in their total credit portfolio had risen from 13.4% to 35.9%;
- The agricultural credit portfolio had increased by 168%;
- The network of branches included in receiving and processing loan applications for agriculture and micro-lending had expanded from 2 to 74;
- The number of credit officers included in agro-lending had risen from 18 to 189;
- Average annual interest rate for loans supporting agriculture had plummeted from 15.7% to 9.2%;
- Most of the PFIs had experienced increased customer interest for loans in agriculture.

The achievement of the set objectives was a long process of joint cooperation between ACDF, PFIs and all involved partners. A number of activities were taken in this manner. ACDF has organized and implemented significant number of capacity building and training programs for PFIs' staff performed by highly respectable international financial training institutions. These trainings had strong impact in increasing PFIs credit portfolio by involving their branches in the loan processing operations, mitigating credit risk, improving quality in processing loan applications etc. For example, in the above mentioned questionnaire, PFIs have responded that these trainings influenced in shortening the duration of loan applications processing from 20 to 13 days. At the end of 2011, this figure dropped to 11 days.

#### **On the National Economy:**

To assess the impact of ACDF lending on country's increased agricultural production, it is of crucial importance to present a brief analysis of the purchases. About 21% of the loans went for livestock in order to buy:

- 38,000 sheep, lambs, goats and kids (4% of the nation's sheep/goats livestock);
- 11,000 cattle (3% of the nation's cattle livestock);
- 6,000 pigs (3% of the nation's pig livestock);
- 173,000 heads of poultry (9% of the nation's

The result suggested that PFIs have strong, yet conservative approach in terms of collateral requirements. Even though ACDF credit line “has persuaded” PFIs to accept farmers as relevant business partners and therefore to accept their rural premises (agricultural land, rural housing and production facilities, equipment, mechanization, herds) as collateral, it is clearly evident that PFIs’ collateral policy needs further relaxation in order to expand their outreach.

- poultry) and  
• over 10,000 tons of fodder.

Identical 21% were used for horticulture, mainly to construct 203 ha of plastic tunnels and 6 ha of greenhouses. Practically, 40% of plastic tunnels and greenhouses in the country were built or reconstructed with ACDF funds. The loans for viticulture were used for raising 760 ha of vineyards (4% of the nation’s vineyards) and those for fruit growing, for raising 712 ha of fruit yards (mainly apples, peaches and plums), or 5% of the fruit yards in the country. About 450 ha of agricultural land were covered with irrigation systems. The rest of the funds were used to buy 912 pieces of tractors, harvesters and additional auxiliary agricultural mechanization.

The lending to agro-exporters influenced in agricultural exports boost. Nearly EUR 3.5 m. went in purchasing domestic agricultural products for export purposes resulting in net exports of approximately EUR 11 m. added to the country’s capital account.

One of the key roles of ACDF was strengthening the supply chain connections. Having in mind that the three loan categories form a supply chain circle, ACDF operations are an excellent example of how these three supply chain stakeholders should be financially supported. Besides direct supporting of new jobs, ACDF helped in supply chain integration of over 65,000 individual suppliers of agricultural

products by lending to agro-processors and agro-exporters. As mentioned before, the latter used the loans to purchase agricultural goods, expanding therefore their network of individual suppliers.

At the end, ACDF in its operations strongly insists in including farmers and other beneficiaries to formal channels of the economy, thus creating basis for taxation and increased revenues to national budget. Transferring loan assets directly to the banking accounts of the suppliers, insisting on payment by invoices and purchase contracts registered with the notary and mandatory attachment of all necessary licenses and approvals to loan applications, narrowed the possibilities of tax evasion and other “grey economy” activities.

## 5. Conclusions & Recommendations

**For Beneficiaries:** ACDF is one of the most favorable credit lines on Macedonian capital market. Nevertheless, during the analyzed period, ACDF unit has refinanced 4,620 loans to individual farmers which is 3.8% of people employed in agriculture (according to 2007 Macedonian Agriculture Census) and 881 loans to SMEs which accounts about 25% of the enterprises registered to be working in the agro-industrial complex. This appoints to certain lack of information among stakeholders about the possibilities of gaining cheap finance to their agribusinesses. Even the ones who are aware of the existence of such funds are sometimes reluctant to fulfill policy conditions required for granting a loan.

It is of great importance for farmers and agro-SMEs to be in constant search of improvement their competitiveness. One of these efforts is permanent and on-time information about availability, criteria, preconditions and innovative concepts of financing. Once these finances are located, next is doing all the best to meet their prerequisites in order to obtain them easily.

### For PFIs:

Between 2003 and 2009, the author of this paper made a survey on the problems beneficiaries faced when applying for ACDF credit at PFIs. On a sample of 509 beneficiaries, a sole question had been posed: “*What was your biggest problem in the process of applying and getting ACDF loan?*” The responses were as following:

- High collateral requirements – 198 beneficiaries (39%);

- Long process of approval – 112 beneficiaries (22%);
- Inadequate terms of repayment – 81 beneficiaries (16%);
- High interest rate - 31 beneficiaries (6%) and
- No serious problems - 87 beneficiaries (17%).

It is also noticeable that remote, mountainous, border villages are under-represented in commercial micro-lending. Financial institutions commonly justify their

lack of operations to these rural areas with poor profitability that cannot generate the cash flows needed for adequate debt-servicing, high transaction costs, poor infrastructure, low value and unregistered property with unidentified ownership that generates high lending risk.

ACDF illustrates that with appropriate, tailored, commercially driven support measures in place, confidence of financial institutions in rurally based lending can be generated, including in the perceived “high risk” areas of lending to individuals in remote rural areas. The ACDF results quite clearly show that rural farmers and small-scale entrepreneurs are able to invest successfully on the basis of commercial borrowing and thereby markedly improve their incomes.

The Macedonian Government acknowledges the crucial role ACDF has played in the past ten years and sees the role ACDF can play in the future regarding the usage of EU pre-accession funds. In short to medium-term, country’s emphasis on rural development as part of the EU convergence process is expected to ensure that preferential refinancing rates will continue to be available through ACDF in order to encourage higher levels of PFI investment in agriculture and related industries and serve rurally-based customers.

For these purposes, the Government has adopted a 5-year National Program for Agriculture and Rural Development providing additional EUR 22 m. by year 2017 for capitalizing ACDF. Having in mind the high demand and great potential of Macedonian

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While initially offering incentives to all interested financial institutions to expand their rural operations, the longer-term objective of ACDF interventions has been that the banks and other financial operators would increasingly start to consider rural small and medium-scale producers and enterprises as a part of their mainstream clientele, that would in the near future entirely be served with their own resources.

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#### **For the Country:**

ACDF refinancing activity is an original method of soft subsidy to interest rates not in contrary to WTO Agreement on Subsidies and Countervailing Measures. This operation prevents direct subsidies on interest rates (forbidden by WTO) and states them as a voluntary concession by the PFIs in order to expand their outreach. We have shown that it was effective way to encourage lending to agribusiness. However, credit lines of which ACDF revolving fund is consisted are in deep process of repayment to the foreign creditors. This creates continuous decrease of available funds for further lending to target groups. At the end of 2012, ACDF account had balance of only EUR 0.1m. liquid funds and EUR 23 m. receivables.

agribusiness this amount is acceptable, yet insufficient under the circumstances. It is our humble opinion that ACDF revolving credit fund should be capitalized with at least another EUR 10 m. hence a new sustainable revolving fund worth EUR 32 m. would be created in order to meet the financial needs of the target group, once majority of liabilities to foreign creditors are repaid.

Along with the financial strengthening, it is of great importance that human resources of ACDF unit should also be enhanced so it can appropriately respond to increased demands.

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Providing agricultural sector with preferable credit lines under terms and conditions acceptable to each farmer and SME will became a challenge for using favorable funds for achieving EU goals and standards. These loans would ensure resources for financing agriculture and rural development projects, thus preparing them to use European pre-accession IPARD fund in near future.

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#### **References**

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- [2] International Fund for Agricultural Development - <http://www.ifad.org>
- [3] Macedonian Bank for Development Promotion, *data from internal sources*
- [4] Official Gazette of Republic of Macedonia, No. 47/1996, 7/1997, 58/1997, 107/2000, 4/2002 and 102/2008
- [5] National Bank of the Republic of Macedonia – <http://www.nbrm.mk>
- [6] State Statistical Office of Macedonia – <http://www.stat.gov.mk>

## Appendix

	Year	2004	2005	2006	2007	2008	2009	2010	2011
population (thousands)		2,033	2,037	2,040	2,043	2,047	2,051	2,055	2,059
Inflation (end of year %)		-1.9	1.2	2.9	6.1	4.1	-1.6	3.0	2.8
GDP (m. EUR)		4,442	4,813	5,231	5,966	6,720	6,704	7,058	7,504
GDP (growth %)		4.6	4.4	5.0	6.2	5.0	-0.9	2.9	2.8
GDP agriculture (m. EUR)		491	507	545	484	481	567	554	613
GDP agriculture (growth %)		6.4	0.3	4.8	-2.9	-1.2	17.8	-1.9	10.7
State expenses (m. EUR)		1,437	1,635	1,728	1,920	2,289	2,275	2,500	2,600
MAFWE expenses (m. EUR)*		28	33	47	46	76	84	105	92
Deficit (% of GDP)		0.0	0.2	-0.5	0.6	-0.9	-2.7	-2.4	-2.5
Credit portfolio (m. EUR)		951	1,150	1,507	2,094	2,809	2,910	3,169	3,459
Credit portfolio (growth %)		4.3	4.1	6.7	9.9	10.7	1.5	3.0	3.6

\*) Ministry of Agriculture, Forestry and Water Economy

**Sources:** State Statistical Office of Macedonia and National Bank of the Republic of Macedonia

<sup>i</sup>For IFAD in Macedonia see: <http://www.operations.ifad.org/web/ifad/operations/country/home/tags/macedonia>

<sup>ii</sup>For IFAD I and IFAD II Agreements see: Official Gazette of Republic of Macedonia No.7/97 and No. 107/2000

<sup>iii</sup>Efimija Dimovska – *Bringing Finance to Rural People – Macedonia's Case (working paper)*; EastAgri Annual Meeting; Istanbul, 2010; p. 1

<sup>iv</sup>For PSDL I see: Official Gazette of Republic of Macedonia No. 47/1996

<sup>v</sup>For PSDL II see: Official Gazette of Republic of Macedonia No. 58/1997

<sup>vi</sup>For EIB APEX Global Loan see: Official Gazette of Republic of Macedonia No. 4/2002 and 102/2008