Abstract

Funding is essential issue for the development of a business, but how the funding will be covered is the issue selected by the financial situation of entrepreneurs. One of the forms of financing is also agricultural loan, but, how is the demand of farmers for these loans and what size of farms request more loans are questions which we will explain in this paper realized by interviews of 250 farmers in five regions of Kosovo (Pristina, Gjilani, Mitrovica, Peja and Prizren) during period of March - September 2013. Data will be processed in SPSS 16.0 program through the production function Cobb - Douglas, regression method - Ordinary Least Square.

Key Words: Request, agricultural loans, farms, Kosovo

1. Introduction

Relying on the fact that about 61% of Kosovo's population live in rural areas, therefore we can say that the agriculture sector is considered as a sector with a fundamental impact on reducing poverty. It is estimated that rural families meet 70% of their household needs from agricultural production, (according to The Ministry of Agriculture, Forestry and Rural Development – MAFRD 2010/2013).
However, small farms, high production costs per unit, low productivity, poor infrastructure and poor services (MAFRD, 2006), the lack of culture on keeping the exact financial evidences are characteristics of agricultural farms today in Kosovo (Shkodra et.al., 2011), which leads to the decrease of the importance of agricultural activities (Trzeciak-Duval, 2003).

Financial institutions offer a form of agriculture financing opportunities to further drive its development.

In Kosovo, the financial sector is led by the Central Bank of the Republic of Kosovo, which is independent and autonomous. Under the leadership of the CBK are commercial banks and microfinance institutions which finance farmers through loans.

The financing of the agricultural sector is the backbone of its development in general, given that farmers have a great lack of capital and technology, which are important voices in increasing their productive potential. The role of capital is to raise the marginal productivity of labor input above zero (Nurgaziev, 2010; Ćechula, 2006). Capital is a fundamental component in agricultural production and the accumulation of capital is key to agricultural growth and development process (Butzer, et.al, 2010: Orebiyi, 2011).

Or as well Thon Duong and Izumida: A frequent cause of market failure is limited access to working capital / credit (Duong and Izumida, 2002).

Given that funding from the saved resources from farmers is very little opportunity for achieving meaningful goals, the key solution to this problem is financing from financial institutions.

Therefore, farmers should be directed to financing through loans and grants and subsidies to use in case of opportunity. Loan, as one of the critical non-land inputs, has two-dimensions from the viewpoint of its contribution to the augmentation of agricultural growth (Golait, 2007). They are very important for increasing the productivity of farms in the countries in transition (Shkodra, et.al, 2012; Asiedu and Fosu, 2004). The increase of farm’s profitability cannot happen through self financing but through loans which are very necessary (Shkodra, et al, 2013). According to Swinnen and Gow (1999), access to agricultural loan has been severely constrained in developing countries, it motivates the farmer thereby encouraging him to invest in new opportunities (Orebiyi, et.al, 2011).

From the experiences of developing countries also the Government of Kosovo since 2012 has started to give a commitment to agricultural loans by making the creation of a guarantee fund for agricultural loans in
collaboration with USAID, which will help farmers in the creation or increase of their activity, called as DCA (Development Credit Authority). This is very important for farmers: “Farmers are usually obligated to stop their activities in farms because the loans for agriculture are very unfavorable” (Shkodra, et.al, 2013)

Agricultural loans will help these farmers more to increased activity in the advancement of technology, tools, agricultural fertilizers, seeds, etc. that will affect their productivity growth which will come from revenue growth, increased employment, meeting the requirement of the country with those products, etc.

These are very important issues in which funding will affect their growth and development, but to what extent is the demand for loan from our farmers will elaborate on this research.

2. Literature review

The loan is considered as an important instrument for increasing agricultural production and farm income, (Doppler and Bauer, 2010), through new technologies to receive inputs and increase productivity (Nurgaziev, 2010) or loan is an important component in the modernization of agricultural activities, (Baker and Holcomb, 1964) and agricultural loans are expected to play a crucial role in the development of agriculture (Duong and Izumiad, 2002).

Many authors have different definitions for the loan but its role will be understood if we ask the question "what" and "how" would be without loan? Then we will understand that "how" and "what" is the significance of a loan system? (Shkodra, et.al, 2012). Obviously this matter happens to both sides: the bank as loan issuer which will greatly benefit from this loan, where 70-80% of total banks revenue comes from loans (Luboteni, 2007) and the receiver who will improve the development of its business. But, to what extend our farmers are willing to ask for loan, despite all the benefits that originate from the loan shows the indicator of their requests. The word "request" means that we are dealing with the readiness of farmers in getting a loan. When we say "readiness" we understand that the farmer is in need and is willing to take the loan.

So, the need and readiness are factors that affect the determination of the demand for loans. However, availability is difficult factor achieved by
farmers as, inter alia, is also influenced by the conditions offered by commercial banks for loans.

3. Research methodology

The research was conducted by primary and secondary data. Primary data are considered as research conducted in the field where this paper will be supported, and as secondary data are considered all materials consulted regarding agricultural loan published in the country and abroad, and most specifically in developing countries to which category of Kosovo belong. Statistical analyzes were processed with the program Statistical Package for Social Sciences (SPSS) version 16.

The research was conducted in five regions of Kosovo, Gjilan, Pristina, Mitrovica, Peja and Prizren, which included a total of 250 farmers during the period March - September 2013.

Hypotheses set are: land area, periods of activity, interest rates, income from farm income, other income and the value of collateral.

Through regression model will do a linear estimation between loan demand and variables: land area, periods of activity, interest rates, income from farm, other incomes and the value of collateral. The dependent variable is the amount of funds applied by farmers.

4. Results and interpretation

From research conducted we see that from interviewed farmers only 4.4 percent belong to female gender, while the rest 95.6 percent belong to the male gender. Regarding the age of the respondents it is pleasure when we understand the start of engagement of new age group although this is one of the lowest rates in the age groups categorized with only 3.6 percent in age groups under 29 years old. Then with a greater percentage we age groups over 60 years by 14.8 percent and the age group 30-39 years with 19.2 percent.

With 30 percent we have age groups 50-59 years and greater participation by 32.4 percent belongs to the age group 40-49 years.

And as regarding education also we have not satisfied insight since a great number of the interviewed farmers have only few years in education. From the Table 1 to 3 we can see that 6.2 percent have no education at all or have just up to 4 years of education. With primary education are 33.6
percent, while with the secondary education which is considered 12 years there are 47.2 percent, whereas with superior education the participation is low with only 2.35 percent.

**Table 1:** Description of data according to Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>11</td>
<td>4.40%</td>
</tr>
<tr>
<td>Male</td>
<td>239</td>
<td>95.6%</td>
</tr>
</tbody>
</table>

**Source:** Author’s own calculation with data from the field research, March - September 2013

**Table 2:** Description of data according to Age (in years)

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 29 years old</td>
<td>9</td>
<td>3.6</td>
</tr>
<tr>
<td>30-39</td>
<td>48</td>
<td>19.2</td>
</tr>
<tr>
<td>40-49</td>
<td>81</td>
<td>32.4</td>
</tr>
<tr>
<td>50-59</td>
<td>75</td>
<td>30.0</td>
</tr>
<tr>
<td>60 year old and more</td>
<td>37</td>
<td>14.8</td>
</tr>
</tbody>
</table>

**Source:** Author’s own calculation with data from the field research, March - September 2013

**Table 3:** Description of data according to Education (in years)

<table>
<thead>
<tr>
<th>Education in years</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 4</td>
<td>18</td>
<td>6.2</td>
</tr>
<tr>
<td>8</td>
<td>84</td>
<td>33.6</td>
</tr>
<tr>
<td>10</td>
<td>6</td>
<td>2.4</td>
</tr>
<tr>
<td>11</td>
<td>4</td>
<td>1.6</td>
</tr>
<tr>
<td>12</td>
<td>118</td>
<td>47.2</td>
</tr>
<tr>
<td>13</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>6</td>
<td>2.4</td>
</tr>
<tr>
<td>15-16</td>
<td>4</td>
<td>2.35</td>
</tr>
</tbody>
</table>

**Source:** Author’s own calculation with data from the field research, March - September 2013

It is very interesting from what we understood from results regarding the correlation between the number of farmers requested loans and those who received loans from interviewed farmers. In Figure 1 we present the
percentage of farmers demanding and not demanding loans and winning and non-winning loans.

**Figure 1:** Percentage of farmers demanding and not demanding loans and winning and non-winning loans

![Figure 1: Percentage of farmers demanding and not demanding loans and winning and non-winning loans](image)

**Source:** Author’s own calculation with data from the field research, March - September 2013

From Figure 1, we see that out of the total of 250 farmers interviewed only 39.2 percent had requested loan in financial and microfinancial institutions operating in Kosovo, while farmers who have not requested loan have a high frequency with a 60.8 percent of interviewed farmers. This high percentage also occurs because of lack of knowledge of farmers for banking institutions’ offers, or according to the Kosovo Competition Authority this is partly due to their inability to process information and partly by the lack of information provided by the banks. Figure 2, will present three options for which farmers are asked whether they have received information on agricultural loans from them? We see that only 8.5 percent of them have visited the financial institutions to be informed of agricultural loans while none of them saw any commercials for agricultural loans. And regarding the brochures 17.76 percent of them have received brochures from financial institutions for information on loan conditions.
In a question “Do you need financial means” we see that 58 percent farmers have answered with “Yes” whereas only 2.8 percent have answered with “No”, see figure 3.

In Table 4, we will see how the demand of agricultural loan by farmers interviewed, is based on the assumptions set out above, which will determine the farmers' demand for loans.
Table 4: Regression result of the determining factors of demand loans

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Evaluation coefficients</th>
<th>T-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.602</td>
<td>0.921</td>
</tr>
<tr>
<td>Land surface</td>
<td>0.266***</td>
<td>2.325</td>
</tr>
<tr>
<td>Activity period</td>
<td>-0.096</td>
<td>-1.961</td>
</tr>
<tr>
<td>Interest rate</td>
<td>-0.176</td>
<td>-1.052</td>
</tr>
<tr>
<td>Incomes from farms</td>
<td>0.094**</td>
<td>1.897</td>
</tr>
<tr>
<td>Other incomes</td>
<td>-0.068</td>
<td>-1.064</td>
</tr>
<tr>
<td>Value of collateral</td>
<td>0.011</td>
<td>3.201</td>
</tr>
</tbody>
</table>

Source: Author’s own calculation with data from the field research, March - September 2013
Notes: *** Important at level 1%, ** Important at level 5%, * Important at level 10%
Valid number n= 98, R²= 0.49, Adjusted R²= 0.44

5. Conclusions

It was understood from the research that a very important issue is education, a factor which is very important in the management of a farm and taking decision when requesting loans from financial institutions.

From the above results we see that the farmers demand for agricultural loans is very low, only 39.2 percent of them. Although 60.8 percent of farmers didn’t request loans, we see that their needs for financial tools are great because 58 percent of them have claimed so.

In Table 2. we see that the surface of the land has a positive coefficient, which indicates that there is a consistency between the land surface and the loan application.

In practical terms this issue is unacceptable because farmers with small land area need to take large amounts of loans since only in these cases have the opportunity to realize a proper investment plan.

Period of activity showed a negative coefficient, which indicates that farmers with greater experience are less willing to request loan than farmers with little experience. I think it is because farmers with more experience have created a greater equity, and are oriented to the investment with its own means.
Young farmers or in the initial years of their activities have request for loan, since the funds they possessed were invested at the beginning of their activity, and for several years they are unable to invest until they make savings on profits for consecutive years.

Regarding the interest rate we see that it showed negative coefficient. This shows that the relation of loan demand with interest rate are quite opposite, which means that if interest rate increases then it will significantly reduce demand for loan and vice versa, if the interest rate reduces it will increase quite a lot the demand for loans that strengthens the view that the interest rate is a strong factor which affects the lower demand for agricultural loan even though the needs of farmers for loans are great.

Incomes from farms have a positive coefficient, but the value of farmers' income for capital investment is low even though the demand for loans is low compared to the income of farmers. However, the negative coefficient is also for other incomes which would help farmers to increase their income. This negative value indicates that the demand for loans is small compared to other income of farmers.

As regards to collateral, farmers are dependent on the demand of loans at great value, since the greater is the amount of loan requested more collateral is required where the collateral value is in relation to the market value of 200 % higher.

R-square is $R^2 = 0.49$ shows that 49% of the variability of demand for loan requested from farmers is explained by the land's surface and the income from farm.

From all this we can estimate that the level of consumption of agricultural loans is very low in relation to the need for funding, and this is because of high interest rates, and that has affected farmers with lower income and small surfaces, who are unable to cover the costs of loans.

The lack of demand for agricultural loan is not only because of high interest rates but the lack of information for conditions of loans from financial institutions is also seen as a problem, since financial institutions have done little to promote agricultural loans.

Leading institutions in Kosovo must work intensely in the regulation of agricultural loan policies in favor of farmers, with the purpose of providing opportunities to farmers for the growth and development of their activity.
List of References


Central bank of Republic of Kosovo.


Kosovo farmers’ demand for agricultural loans


