



## **Evaluation of the Viewpoint of Villagers in Ab Shirin Region of Kashan City About the Role of Extension Programs in Agricultural Development and Poverty Reduction Through the Provision of Low-Interest Credit**

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**Abstract.** Agriculture can be considered one of the most important economic sectors, which has allocated to itself a significant percentage of the employees. So pay attention to this part of the economy and great cortex of workers and also development and improvement of its current is unavoidable. However, agricultural development depends on the backing of the government and organizations involved, because low-income segments account for most agricultural workers. Low-interest financing is one way of empowering low-income segments and is meant to provide loans with small amounts and without collateral to these classes that person is obliged to repay them in the short-term. Hence, the promotional schedule for the appropriate use of credits to reduce poverty and agricultural development is inevitable. The purpose of this study is evaluation of the viewpoint of villagers in the Ab shirin region of Kashan city about the role of extension programs in agricultural development and poverty reduction through the provision of low-interest credit that is done using the descriptive – correlation. The statistical population of this study is about 1296 people in the rural area of Ab Shirin in Kashan city, that 144 of them were selected as sample by using Cochran formula. A self-designed questionnaire was used for data collection. The questionnaire's validity was applied with business experts Agricultural Extension and Education and Cronbach's alpha test was approved about 89 percent. Reliability of the research is obtained by using SPSS software. The results showed that willingness of farmers to use the funds provided by the Agricultural Bank is positive. Based on the results, there is a significant relationship between impacts of extension programs the proper use of the funds provided by the government to reduce poverty.

**Keywords:** agricultural development, microcredit, poverty, extension programs.

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## Introduction

Agriculture is one of the most important parts of our economy and accounts for a considerable percentage of State employees in different years. So that today, nearly a quarter of the total working population of the country is related to agriculture, so pay attention to this part of the economy and the large working class and its development and improvement of the current situation are inevitable. Agricultural development would not be possible without the financial and intellectual support of Government and organizations involved in because low-income cortexes are formed the most family-farm employment. If we do not pay attention to the cortex and the critical role of this number in developing of agriculture and countries and is not done the necessary measures to empowering them, developing of agriculture that is part of national development may not be possible. The question that arises here is how can help to the poor farmers and the general Villagers and further poverty reduction, lead to the development of agriculture?

Finance and micro-credit granted is the answer to this question. Microfinance is considered one of the ways empower low-income cortex that its history goes back to several decades in Iran. In general, it is said that the definition of loans or credit "amount of money, goods, or services that a person or institution give to another person for a period of time (limited or unlimited) versus getting some extra interest or no interest and additional amount (loan loan) to get collateral and or a personal account. Microfinance (microcredit) is also meant to provide loans with small amounts and without collateral to low-income cortex it is believed that a person is obligated to repay them in short term.

Agricultural Bank of Iran is a major supplier of agricultural credit sources, both macro-and micro-credit. In other words, the Agricultural Bank is the most important place for farmers to receive loans or insurance products to go there. In IRAN, Agricultural Bank is one of the examples known in the specialized and development banks. The bank can also solve problems of persecuted people in agriculture play its role as an important tool for agricultural development and the development of the country by granting of credit, term and low-interest loans,

various deposits, capital and non-capital facilities, direct and indirect investments in the production units and projects. Also, Agricultural Bank can provide areas of agricultural production with the current needs of farmers and encourage them to continue and stay in the cycle of production. However, Agricultural Bank can perform satisfactory motion in the field of development of agriculture, increase farmers' incomes and ultimately improve their lives by providing capital spending on infrastructure, including cultivated land reclamation, water supply for agriculture, building industries agriculture, etc.

### **Materials and Methods**

This research is through surveys and descriptive - correlation type and is conducted using a questionnaire. Zarcheshmeh watershed area was selected as the study area and villagers of Hunjan village were selected as the Statistical Society. Zarcheshmeh watershed area of the Hunjan is the sub-domains of Gavkhoony bog as the main area and is located in the southeastern of Shahreza city. Given the number of community members (N=5000) and also according to Cochran's formula, Statistical sample of this study was estimated 127 people. To select a sample, a random sampling procedure was used. A questionnaire was developed to collect the required information in four sections included questions about characteristics of demographic, agronomic, economic and questions about the villagers' views about the role of Agriculture Bank in the agricultural development and Its content was confirmed by experts and professors of Agricultural Extension and Education Agricultural Bank experts. Preliminary tests in a region similar to the statistical community (Esfarjan village) with a total of 30 questionnaires were performed and with acquired data and using Cronbach's special formula in SPSS Software, Credit of questionnaire to all sectors obtained 0.78.

The dependent variable in this study is rural views about the role of Agriculture Bank in the development of the agricultural sector through the supply bank credit and the independent variables are also included characteristics of personal, farm and agricultural economy. In this study, descriptive statistics (Frequency, percentage, average, standard deviation) and also inferential statistics including

the Spearman correlation coefficient and one-way analysis test of variance was used for statistical analysis. All statistical calculations of research were done by SPSS software.

## **Results and Discussion**

### 1-Descriptive Statistics

This section presents the analysis of data from the questionnaires and the research variables are examined.

1-1: Describe the individual, economic and agronomic characteristics of wheat growers

The results of the analysis of personal, economic and crops characteristics of wheat growers are given in Table 1. Based on this table, mean age of studied wheat growers are 50.2 years and their ages ranged between 25 and 87 years respectively. The results of analysis of the situation shows that the average area of cropland belongs to studied subjects is 42.3 acres that their cropland ranged from 51 to 70 acres. The number of pieces of studied Cropland shows that average Cropland components are equal to 14.7 pieces and the number of components is ranged from 6 to 26 pieces. Analysis of activities Background of wheat production shows average activities background of Wheat growers equals 22.6 years and their Activities Background of production is ranged from 1 to 60 years. The analysis of educational level of studied subjects also suggests that the average of education level is equal to 11/4 years and among the people, their literate has 16 years of education.

**Table 1: individual, agronomic and economic characteristics of studied subjects**

<b>Variable</b>	<b>Average</b>	<b>Standard deviation</b>	<b>Minimum</b>	<b>Maximum</b>
<b>Age (years)</b>	<b>56.5</b>	<b>11.15</b>	<b>25</b>	<b>78</b>
<b>Education level (years)</b>	<b>3.6</b>	<b>3.33</b>	<b>0</b>	<b>16</b>
<b>The total area of cropland (acres)</b>	<b>41.39</b>	<b>11.40</b>	<b>15</b>	<b>60</b>
<b>Number pieces of Wheat</b>	<b>14.07</b>	<b>6.03</b>	<b>6</b>	<b>26</b>
<b>Activities Background of Wheat farmers (years)</b>	<b>21.63</b>	<b>14.83</b>	<b>1</b>	<b>50</b>

## **2-Use of communication channels**

In order to determine the extent of communication channels by people, the channels in each case was discussed with the range of 5 options were evaluated, which were considered too low to too high. According to the findings in Table 2, the highest frequency of people with 56 (46.6%) persons in terms of using communication channels in the high and very high use of communication channels and the lowest rate of people with 20 (16.7%) located in very low and low use of communication channels.

**Table 2: Frequency distribution of persons according to use of communication channels**

Communication channels	Frequency	Percent	Cumulative percentage
Low	20	16.7	16.7
Average	44	36.7	53.3
High	56	46.6	100
Sum	120	100	-

Source: Research Findings

Communication channels were also prioritize based on rural use of them and it was found that attending in Education - Promoting classes has been in the first priority and listening to the related educational programs from radio has been in the final priority of communication channels.

### **3- Villagers' knowledge of credit provided by Agricultural Bank**

In order to assess the knowledge of rural in the facilities provided by the Agricultural Bank 5 questions was used in Likert scale. In design of these questions have been used the opinion of engineering professors and experts that have practical experience in this field. According to Tables 3 and 4, the 56 persons (76.6%) of the respondents have expressed that their familiarity of banking facilities of agriculture is minimal (11.3%) and low (33.9%). However, just 1.6 % of the respondents have expressed that their understanding of banking facilities of agriculture is very much.

**Table 3: Frequency distribution of subjects according to their level of knowledge regarding the facilities provided by the Agricultural Bank**

Familiarity with banking facilities	Frequency	Percent	Cumulative percentage
Very Low	14	11.3	11.3
Low	42	33.9	45.2
Average	39	31.5	76.6
High	27	21.8	98.4
Very High	2	1.6	100
Sum	124	100	-

Source: Research Findings

**Table 4: Frequency distribution of items used to determine the level of knowledge of rural from banking facilities (n=127)**

Items	Very High		High		Average		Low		Very Low	
	N	%	N	%	N	%	N	%	N	%
Awareness of providing banking facilities of Agricultural Bank	14	11.3	18	14.5	20	16.1	37	29.8	35	28.2
Awareness of how to receive the facilities of the Agricultural Bank	8	6.5	19	15.3	30	24.2	30	24.2	37	29.8
Awareness of how credit repayment	4	3.2	10	8.1	29	23.4	34	27.4	47	37.9
Awareness of the long-term credit bank	3	2.4	1	0.8	17	13.7	38	30.6	65	52.4
General awareness of the plans that the bank gives them the facility	17	13.7	32	25.8	15	12.1	35	28.2	25	20.2

Source: Research Findings

Also according to the findings of Table 5 identified that most people who were familiar with the quality and quantity of facilities provided by Agricultural Bank, have reached to this knowledge by the visit of the areas that Bank had given loan to start them, So 69 people have confirmed this point. Quote of the people and other

beneficiaries account for least abundant in terms of awareness of rural to banking facilities so that 38.1% have point this out.

**Table 5: Awareness ways rural of facilities of Agricultural Bank**

Way	Yes		No		Sum
	N	%	N	%	
visiting of areas where Agricultural Bank plans have been done there	69	60.5	45	39.5	114
see a movie of areas that Agricultural Bank plans have been done there was	50	44.2	63	55.8	113
Quote of experts of Agricultural Bank and professionals	51	45.1	62	54.9	113
Quote of people and other farmers who had used the facility	43	38.1	70	61.9	113

Source: Research Findings

#### **4- View of rural towards providing facilities of development by the Agricultural Bank and its role in agricultural development**

The purpose of measuring this variable is determination of the rural attitudes about providing facilities for development by Agricultural Bank and its role in agricultural development. In this study, a Likert scale was used to measure attitudes. At this scale, respondents express their agreement with each statement on a scale's range (completely disagree, neutral, agree, completely agree). Then the answer to any of the items evaluates numerically and the sum of the numeric represents the attitudes on the scale.

According to the findings of this study, the mean attitude towards rural credit is 3.81 and standard deviation is 0.923. The maximum score of villagers' attitude towards credits provided by the Agricultural Bank is 94 and minimum score



is 19. Table 6 confirms these findings. Based on the answers provided by the villagers, their attitudes towards the subject are grouped into four levels: weak, average, good and excellent follows. This classification is based on the mean and standard deviation using the formula of Seddighi and Rusta (1382).

$$(A) = \text{Weak} : A < \text{Mean} - \text{Sd}$$

$$(B) = \text{Average} : \text{Mean} - \text{Sd} \leq B \leq \text{Mean}$$

$$(C) = \text{Good} : \text{Mean} < C \leq \text{Mean} + \text{Sd}$$

$$(D) = \text{Excellent} : \text{Mean} + \text{Sd} < D$$

As is clear from Table 9, the majority of villagers 43 people have relatively good vision on the role of Agricultural Bank in the development of the agricultural sector through the supply of micro-credit, while 12.6% of them are in weak level, 26.3% in average level and 15.8 % in excellent level.

**Table 6: Frequency distribution of individuals in terms of their attitude in the field of banking facilities**

Levels of technical knowledge	Frequency	Percent	Cumulative percentage
Weak	12	12.6	12.6
Average	25	26.3	38.9
Good	43	45.3	84.2
Excellent	15	15.8	100
Sum	95	100	-
SD=0.923	Mean=3.81	Min=9	Max=94

Source: Research Findings

**Table 7: Distribution of people based on the answers to the considered items to measure the attitudes of villagers toward the role of banking facilities in agricultural development**

Items	Totally disagree		disagree		neutral		Agree		Totally Agree		Mean	Sd	Priority
	N	%	N	%	N	%	N	%	N	%			
The use of Agricultural Bank facilities helps to increase the production.	5	4.2	4	3.4	19	16.2	34	28.8	56	47.5	4.12	1.071	1
When the facilities to be used, the income of farmers will be added.	5	4.1	16	13.2	10	8.3	24	19.8	66	54.5	4.07	1.239	2
Soil and water are so valuable that they should be invested.	6	5	5	4.2	20	16.8	37	31.1	51	42.9	4.02	1.108	3
Because the surrounding area had used and resulted of credit I'm also keen.	5	4.2	6	5.1	29	24.6	24	20.3	54	45.8	3.98	1.139	4
Because the other farmers had done and resulted, I am willing to participate in this project.	7	6	11	9.5	14	12.1	33	28.4	51	44	3.95	1.221	5
The use of banking facilities greatly reduces the problems.	5	4.2	17	14.3	9	7.6	40	33.6	48	40.3	3.92	1.197	6
The use of banking facilities causes improving in the region.	5	4.4	9	8	17	15	41	36.3	41	36.3	3.90	1.11	7
The use of banking facilities increases the level of employment in the region.	7	5.8	14	11.7	17	14.2	44	36.7	38	31.7	3.77	1.168	8
The use of banking facilities and optimal use of resources keep soil and water resources.	7	5.8	14	11.6	15	12.4	50	41.3	35	28.9	3.76	1.162	9
The using of banking facilities is a new experience for me.	5	4.2	15	12.7	22	18.6	51	43.2	25	21.2	3.64	1.082	10
The use of banking facilities will cause this village be premier than other villages.	7	5.8	13	10.8	22	18.3	54	45	24	20	3.62	1.100	11
The use of banking facilities will cause greater sense of cooperation between the people of the region.	11	9.6	5	4.3	31	27	4	34.8	28	24.3	3.60	1.183	12
The use of banking facilities will cause the people stay in the village and do not have tendency to migrate	14	11.8	14	11.8	26	21.8	30	25.2	35	29.4	3.49	1.339	13
The use of banking facilities will lead to lower costs.	3	2.5	23	19.3	34	28.6	32	26.9	27	22.7	3.48	1.118	14

Scale: 5 = totally agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = totally disagree

### 5- Influenced factors on villagers' participation in tendency to receiving facilities of Agricultural Bank for agricultural development

As also shown in Table 8, in the study of influenced factors on villagers' participation in tendency to receiving facilities of Agricultural Bank for agricultural development It was found that factors such as easier legislation for obtain loans and implementation of projects by the government are first priorities and existence of bank branch in the country is the last priority.

**Table 8: Prioritization of influenced factors on villagers' participation in tendency to receiving facilities of Agricultural Bank for agricultural development**

Explanation	Mean	Sd	Priority
Government should enact easier laws to borrow	2.70	0.606	1
This work begins by government	2.65	0.647	2
Government prepares and distributes some inputs free of charge to us	2.64	0.637	3
Some things we do not come up governments do itself	2.64	0.667	4
Government helps us to understand the advantages of the facility	2.61	0.587	5
consulting services be provided by the government to us	2.53	0.754	6
These projects are done in cooperative	2.49	0.753	7
People who have done plans talk for us and tell us about the design benefits	2.45	0.752	8
If we do this project, we will be encouraged	2.43	0.659	9
Opinion of people at all stages of the project should be considered	2.43	0.702	10
Become familiar with the plans that have been done in other areas and we visit them	2.43	0.789	11
Provide facilities for projects must be derived from rural experience	2.42	0.700	12
A branch of the Agricultural Bank to be established in rural areas	2.29	0.855	13

Scale: 1 = disagree, 2 = neutral, 3 = agree

Source: Research Findings

## **Conclusions and recommendations**

Agricultural Bank's role in the development of the agricultural sector with emphasis on the supply of micro-credit Agriculture is the most important part of the economy of countries and Iran and also in the various years is allocated of considerable percentage of the country's total employment (about one-quarter of all employees). So pay attention to the growth and development of this sector is undeniable. Homogeneous development means development in all sectors (agriculture, industry and services), so pay attention to the role of agriculture is essential. Cortex of rural has a major role in the development of agriculture while a large part of the cortexes are poor and rural poverty is as an obstacle to economic recovery so that cannot be used from their potential force as desired. Thus the financial support of the cortex in order to empower them has particular importance. Financing of these people are not only effective in reducing poverty, but increasing their economic activities would also be useful (Farzin Motamed and Nematian). In other words one of the factors that play an essential role for providing other inputs and the production and development of agricultural is financial resources that typically, manufacturers are faced with the direct and indirect restrictions in the supply of them. It is inferred that without government help, small farmers often have been encountered many problems in obtaining new services and inputs. And thus do not appear to be significant improvements in efficiency and performance befitting its. In this regard, the use of credit is one of the effective factors in the supply and applying of new technologies by farmers (Soleymanipur and Nikuee, 1383).

Our country as a subset of the global village and developing country cannot be oblivious of the potential role of low income people who have played a major role in the development. Governments can take positive steps in this regard with providing microfinance or microcredit, which is one of the ways to empower low-income strata. Agricultural Bank of Iran is a major supplier institute of agricultural credit sources including the credit of micro and macro. In other words, the most important place for farmers to receive loans and insurance products is Agricultural Banks.

Agricultural Bank of Iran is known as specialized and developmental banks. The banks can also solve problems in agriculture, play a role as an important tool for agricultural development and the development of the country by granting of funds and low-interest and short-term loans, various deposit, capital and non-capital facilities, direct and indirect investments in entities of manufacturing and design, and ...(Noruzi et al. 1383).

Given the importance of agriculture in national development and economic growth, the authorities are seeking to provide financing for small farmers with the establishment of the Agricultural Bank of Iran and pass legislation relating to it. Here the important role Agricultural Bank in development of agriculture is to be noted;

- 1- Granting of funds and low-interest and short-term loans (micro-credit)
- 2- various deposit relating to agriculture
- 3- Granting of capital and non-capital facilities
- 4- Direct and indirect investments in productive units of agricultural
- 5- Providing needs of farmers
- 6- Providing capital expenditures of infrastructure including:
  - Reclamation of under cultivation land
  - Providing water requirements for agriculture
  - Creating conversion industries of agriculture

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