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**EFFECTS OF FINANCIAL INSTITUTIONS ON SMALL HOLDER FARMER'S PRODUCTIVITY: THE CASE OF DURBETE WOREDA, WEST GOJJAM, AMHARE REGION, ETHIOPIA.**

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**ABSTRACT**

The study was conducted in Durbete district on the effect of financial institutions on small holder farmer's productivity. The general objective of this study was to assess the effect of financial institutions on small holder farmer's productivity. In our prevalent and deprived agrarian sector, sufficient credit provision is a serious problem to implant technological advancements and achieve technical efficiency, moreover the establishment and expansion of financial service is also one of the instruments to break the vicious circle of poverty. Lack of agricultural credit has become a bottle neck of development of agricultural sectors. The objective of this paper is to assess the effects of financial institutions on smallholder farmer's productivity and to make some recommendation. Following most recent literature, the paper investigates the effects of financial institutions on small holder farmer's productivity by using descriptive statistics. Results show that age, agricultural credit, education, wealth status and land has significant positive impact on crop productivity. The finding of this research indicates that financial services to the poor farmers would improve their livelihoods enabling them to purchase agricultural inputs. The study recommend that institutional credit should be provided fertilizer loan and improved seed loan appears to be the possible areas of extending credit. Finally, agricultural policy should give sufficient attention to rural credit policies.

**Key words: Micro Finance Institutions, Smallholder Farmers, Productivity**



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## **1. INTRODUCTION**

### **1.1 Background of the study**

Ethiopia whose economy is predominantly agriculture has more favorable natural resource endowment for production of various types of crops and livestock species. Agriculture continues to be source of income and livelihood but also it is a life. In industrial developed countries the percentage of people depended on agriculture for their lively is less than 2%, in developing countries like Ethiopia, agriculture continuous to hold its central place providing subsistence at present to nearly 85% of the total population (CSA, 2009). The size of the rural households in Ethiopia is generally large and they have a low level of literacy. Majority of the farm community comprised of subsistence farmers who are not in a position to use high quality seeds, sufficient fertilizers and improved farm implements non-availability of credit. As a result of this, small farmers are generally characterized as low income, less saving and low capital formation. Hence, rural development is hampered due to lack of credits, weak infrastructure and poor transport systems (Wolday and David P., 2010). Even though there is huge agricultural potential in Ethiopia, the growth in agricultural production has been unable to satisfy the demand. This is due to the nature of farming which is characterized by traditional, small holdings and subsistence type with less than a hectare of land on average (IFAD, 2012). The limited land resource coupled with a faster growing population is aggravating the poverty level of the country. Determination of the above factors which are most relevant in explaining poverty alleviation will have important implications for refining microfinance policy.

In the subsistence agriculture and low income countries like Ethiopia, where the smallholder farming dominate the overall national economy, small peasant farmers often face scarcity of capital due to low level of production to adopt new agricultural technologies. The major causes of low economic growth and high incidence of poverty in Ethiopia include low level of income, savings and productivity in the agricultural sector (IFAD, 2012).



The National Bank of Ethiopia, that is the licensing authority, has since then been issuing number of guidelines that underpin/strengthen the operation of micro finance institutions in the country. Currently there are 30 licensed MFIs in both rural and an urban area of the Steady agricultural development depends up on the continuous increase in farm investment. Investment cannot be made by the farmers out of their own funds because of their present low level of income. Moreover, there exists no significant margin of income that can be channeled into the agricultural sector to undertake development activities. Thus, here comes the relevance of credit to improve the livelihood of the poor by enabling access to rural finance (IFAD, 2012).

Credit is an essential input to increase agricultural productivity through adoption of new technologies. Micro-finance institutions provide suitable financial and other services using innovative methodologies and systems at low cost to meet the needs of low income sections of the population. (IFAD, 2012). However, supplying the required capital to farmers on credit basis is not an end by itself. The main issue here is that, the impact of credit needs to be analyzed by the credit suppliers as well as the credit receivers to achieve their respective goals effectively. Impact analysis studies the effect of an intervention on welfare outcomes. Kathleen (2010) reported on his study that a well-designed impact assessment study can provide insight in to the causal factors behind the success and failure of various microfinance interventions. Impact assessment thus provides information that allows MFIs to improve their services, and improve the impact on their clients.

## **1.2. Statement of the Problem**

Agriculture production is strongly conditional by the fact that inputs are the transformed into outputs with considerable time lags, causing the rural households to balance its budget during the season when there are high expenditure for input purchase and consumption and few revenues. With shortages of access to credit, the budget balance within the year can become a constraint to agriculture production (Dong et.al, 2010; Ali and Deininger et.al., 2010). Thus, if people are unable to finance their agricultural projects themselves, they have to borrow from outside either formal lending institutional or informal money lenders. Winter -



Nelson and Temu (2005) stated that small scale farmers in developing countries may become trapped in poverty by lack of the liquidity needed to make profitable investments. Increased access to credit could generate pro-poor economic growth if poor households are gain sufficient credit from financial institutions, otherwise liquidity-constrained households benefit from the new financial services. In Ethiopia about more than 80% population is highly engaged in agriculture activities but its production and productivity is very low.

This is due to the fact that almost all of the farmers use local technologies and endogenous variety of seeds. To feed the ever growing population small scale farmers should be equipped with science based modern agriculture technologies (World Bank, 2005). Lack of agriculture credit has become a bottle neck of development of the agriculture sectors. Moreover providing access to credit to small holder farmers can increase their production and productivity. Furthermore, such opportunities for farmers would result in technological transfer that raises productivity significantly. While producing the necessary technical inputs, if supports other elements in overall developments plans. Therefore, if must receive support from other measure relating both to agriculture and other sectors of the economic. Success to affordable credit is one of the most important factors affecting production and therefore income of the poor. The poor access to agrarian and support services are attributed to socio- economic factors of the farmers as well as constraints encountered by these formers in institution in serving the small scale farmers and the poor involves high risk and high transaction costs (Okurut et al., 2004 and Spio, 2002).

### **1.3.1. General objective**

The general objective of the study was to assess the effect of financial institutions on small holder farmer's productivity.

### **1.3.2. Specific objectives**

The specific objectives were:

- to assess the effects of financial institutions on small holder farmers and
- to identify the pattern of credit use by small holder farmers.



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## **1.4. Significance of the study**

The study deals with the effect of financial institutions on small holder farmer productivity in Durbete Woreda. Knowledge about the effects of financial institutional credit on small holder farmer output helps small holder farmers to concentrate on credit that has significant influence to improve the profitability of the farm sector. It is hoped that, this study would serve as a clue for further researches in the study area on the title under discussion. That is, the outcome of this study serves as spring board for further research on the area.

## **1.5. Scope and limitation of the study**

The study was conducted in one district, i.e. Durbete woreda. As the matter of fact, there were various limitation of research which includes lack of data, time and financial resource. In addition, shortages of clear information from different respondent were another limitation of the study. Moreover, the study was limited in both sample size and area coverage, due to time and financial capacity of the resources.

## **1.6. Organization of the study**

The remaining part of the thesis is organized into five chapters. The second chapter reviews different studies regarding effects of financial institutions and factors affecting access to credit use. The third chapter introduces the methodology which includes description of the project and study area, source and methods data collection and analysis as well. The fourth chapter describes the results and discussion of the research outcomes and finally fifth chapter present conclusions and recommendations.

## **2. Literature Review**

### **2.1. Development of Financial Institutions**

The history of micro credit is traced back to the early 1700s when Jonathan Swift, an Irishmen, had the idea to create a banking system that would reach the poor. He created the Irish Loan Fund, which gave small short term loans to the poorest



people in Ireland who were not being served by commercial banks, in hopes of creating wealth in the rural areas of Ireland. This idea took years to catch on, but then grew quickly and expanded globally. By the 1800's, the Irish Loan Fund had over 300 banks for the poor and was serving over 20% of the Irish population. In the 1800s similar banking systems showed up all across Europe targeting the rural and urban poor. Friedrich Wilhelm Raiffeisen of Germany realized that the poor farmers were being taken advantage of by loan sharks. He acknowledged that under the current lending system, the poor would never be able to create wealth; they would be stuck in a cycle of borrowing and repaying without ever making personal economic development.

He founded the first rural credit union in 1864 to break this trend. This system was different than previous banks because it was owned by its members, provided reasonable lending rates and was created to be a sustainable means of community economic development (Jennifer, 2010). The idea of credit unions spread globally and by the end of the 1800s, these micro credit systems had spread all the way from Ireland to Indonesia. At the turn of the century similar systems were opening in Latin America. Whereas in Europe the credit unions were owned by its members, in Latin America the institutions were owned by the government or private banks and were not as efficient as they were in Europe (Jennifer, 2010.).

Government subsidies were used to fund loans primarily for agricultural workers to stimulate economic growth but these efforts were short lived. The loans were not reaching the poorest farmers; they were often ending up in the hands of the farmers who were better off and didn't need the loans as critically as others. Funds were being lent out with an interest rate much below the market rate and there repaid, so the banks' capital was depleting quickly and when the subsidized funds ran out, there was no more money to pump into the agricultural economy in the form of micro credit. Grameen Bank in Bangladesh started of as an action based research project by a professor who conducted an experiment credit program. This non-profit program dispersed and recovered thousands of loans in hundreds of villages. The professor tried to extend this idea to other bankers in Bangladesh, but they were afraid that it was too risky as a business and turned down the offer (Jennifer, 2010).



Grameen Bank is now one of the world's largest micro finance institutions with over 4 million lenders. Lenders had learned how to increase loan repayment rates enough to make micro finance institutions sustainable. They targeted women as borrowers and gave them money to invest in businesses that would increase their income and charged very low interest rates so the borrowers could pay back their loans and still have money, i.e. create wealth, for themselves. This is when the term micro finance was coined to replace micro credit, because the new institutions were doing more than making loans; they were offering other financial services to the poor like savings accounts, insurance and money transfers (Jennifer, 2010).

### **2.1.2. Development of micro-finance institutions in Ethiopia**

According to (Getaneh, 2005) to further stimulate economic activities and provide opportunities for the majority of poor to escape poverty through availing more and appropriate financial service. The government has been refining the regulatory frame work for the micro finance operation the regulation that put sailing on the interest rate that micro financial institution could charge from their credit clients to longer exist and no liberal system is in operation (Directive No.MFI 92/98). Where by MFIs could decide the level of interest rate they charge as long as they can remain in the competitive markets, thus opening up a new opportunity in the effort insure both operational and financial sustainability for MFIs.

According to the authors, credit availability is expected to limit constraints hindering timely purchases of inputs and engagement of farm resources. Similar findings were observed that access to credit enables farmers to overcome liquidity constraints that affect their ability to apply inputs and implement farm management decisions timely. Studies undertaken in Ethiopia showed that agricultural finance as a key enabler for agricultural growth in Ethiopia (Wolday and David, 2010). As a result of high population pressure in rural areas of developing countries like Ethiopia, bringing of additional productive land under cultivation is difficult. This mean, there is a productive land limitation. So that, it is necessary the need of improving farm level productivity through intensification. However, some farmers have no adequate source of acquiring the required capital goods for raising their productivity and income level other than access to credit from formal financial



institutions. Therefore, rural credit institution can help improve smallholders' farm productivity through use of purchase farm inputs.

Agricultural credit is one of the measures which are used by the governments to increase agricultural production and improve the living standard of farmers in developing countries. Credit removes a financial constraint and helps accelerate the adoption of new technologies, increase productivity, and improves national and personal incomes. Farmers must spend additional sums of money on improved seeds, fertilizers, and farm implements to increase their agricultural productivity. However, due to low level of real income small farmers in particular cannot undertake such investments without external credit support. Wolday and David, (2010) revealed in their study that credit provision had a significant impact on increasing agricultural production through build-up of production assets, particularly draught oxen, and increasing the amount of land formed by clients who were able to retrieve land previously rented out and farm it themselves, and clients who were able to get more land through rent. There were clear differentials in impact related both to gender and whether clients were urban or rural based. Women took consistently lower loans than men, and were less likely to report themselves as considerably better off as a result of taking credit, initial resource differentials, such as lack of land, labor and other inputs, certainly play a part in this, with women headed households particularly those who were less likely to own oxen and to farm their own land. These are two key indicators of productive capacity and wealth in subsistence agricultural economy. They concluded that the provision of financial services to the poor has a crucial role to play in providing household food security and poverty alleviation.

### **2.2.2 Agricultural Credit**

Agricultural credit is a credit impact for agricultural development for agricultural in stage of transaction. Credit is an instrument that can make change possible with minimum of social and physical loss (ACDI VOCA, 2005). The contribution which creates the credit can make to increase agricultural production and eventually in raising the standard living of small farmers is very high (Balshaw, 2000). Farmers demand for credit arises from their pursuance of the twin goals of promoting production income and asset or production and asset loan and



stabilizing consumption or consumption loan. In Ethiopia rural credit is provided by both formal and informal sources. As a matter of fact the informal sources are believed to be the main source of credit required in the rural society. Negligible access of the rural poor to credit from institutions is due to a variety of (FAO, 2006). Providing household food security and alleviate poverty.

### **2.2.3 Agricultural Productivity**

The concept of productivity is a relative term and sometimes it is considered to be an overall efficiency and effectiveness of productive units or as a ratio of output to the corresponding inputs used. Though all these definitions are apparently conflicting to each other but their different interpretations have common characteristics i.e. productivity is someone's ability to produce more economically and efficiently. In this study therefore, agricultural productivity could be defined as ratio of output to inputs in relation to fertilizers improved seeds, labor and technology (tractor and ox-plough) employed in agriculture.

### **2.3. Project Impact Evaluation**

Project impact evaluation studies the effect of an intervention on final welfare outcomes, rather than the project implementation process. More generally, project impact evaluation establishes whether the intervention had a welfare effect on individuals, households, and communities, and whether this effect can be attributed to the concerned intervention. The main objective of an impact evaluation is to answer the question of whether an intervention leads to a change different from what would have happened without the intervention. According to Hulme (2000), the framework for the study of impact has three elements. The first is a model of the impact chain that the study is to examine; the second the specification of units or levels at which impacts are assessed; and the third is the specification of the types of impact that are to be assessed. All programs have a theory of action that links implementation with outcomes. This theory of action depicts in concrete terms how inputs and activities are related to outcomes by specifying how each activity leads to the desired outcomes. In the case of micro-finance impact assessment, one needs to conceptualize how micro-finance leads to changes and



what changes are reasonable to expect given the service provided and loan conditions (Hulme, 2000).

### **3.1 Description of study area**

Durbete district is one the district in west Gojam zone, which is found in Amhara regional state of Ethiopia. It is far from Addis Ababa 506km north. It is named after the administrative center. It is bordered on the: South by Guta district, West by Zibst district, North by Lalibela town, East by lihudi district and on South East by Amhara region. The total population of this district is 271,018 of whom 138,282 are male and 132,736 are female. The altitude of the district ranges from 1400m to 2340m above sea level. The annual rain fall and average temperature of the district is 900 millimeter cube and 18 degree centigrade respectively (HADB, 2009).The town of the district is Durbete town which has the population of 15,317 of whom 7,796 are male and 7,521 are female (CSA, 2007). The land escape of Durbete district includes mountains, high Forest and plain divided by valleys. A survey of the land in this district shows that 89.1% is arable or cultivable (86.1% was under annual crops), 2.7% pasture, 2.8% Forest, and the remaining 5.4% is considered swampy, degraded or otherwise unusable. Khat is an important cash crop and Peanut is another important cash crop for this district; over 4,500 hectares are planted with this crop.

### **3.2 Sampling technique and sample size**

This was used to select two Kebeles Zibist and Guta Kebeles in order to obtain information from the total 33 Kebeles in the Woreda. Zibst Kebele has 572 households while Guta has 860 households. The total households for both Kebele is 1432.As for as sampling techniques concerned, both purposive sampling and simple random sampling procedure were used due to their simplest in usage, by using aforementioned sampling techniques, the total numbers of sample size of 60 house hold were selected from two Kebele by using Probability Proportionate to Sample size (PPS).

### **3.3. Sample size determination**



The sample size was determined by Yamane's formula. Then Yamane's sampling formula with 60 percent confidence level used to determine sample respondents.

$$n = \frac{N}{1 + N(e^2)}$$

Where n = sample size

Where N = total number of household from two Kebeles

Where e = margin of error

Number of households Zbist Kebele = 572

Numbers of household in Guta Kebele =860

$$N=572+860$$

$$N=1432 \text{ households}$$

From Kurrozibst Kebele

$$1432=60$$

$$572 = n_1 n_1$$

$$572 * 95 / 1432 = 38$$

From Guta Kebele

$$1432 = 60$$

$$860 = n_2 n_2$$

$$860 * 95 / 1432 = 57$$

$$n = 95$$

This shows that the sample size of the respondent from Zibst Kebele is=38 and 57 from Kebele. So, that the total sample size of the respondent from two Kebeles is= 95. But due to shortage of time the collected sample size was 60 households from both Kebele.

### 3.4. Data source and method of data collection



Both Qualitative and Quantitative data were used. Primary data source was obtained from respondents by using face to face interview survey. The secondary data were collected from published and unpublished materials.

### 3.5. Data analysis

Analysis of data was decisive part of research study. Collected data were presented and analyzed descriptively by the help of table, frequency, percent, and

## Results and Discussion

This chapter presents analyses and interprets the collected data. To do this, tables the most data presentation tools used.

### 4.1. Household Socio Demographics

#### 4.1.1. Age and gender of the respondents

**Table 1: Gender group of the respondents**

S. No.	Sex of respondents	Number of respondent	Percentages
1	Male	56	93.3
2	Female	4	6.7
<b>Total</b>		<b>60</b>	<b>100</b>

Source: own computation from primary data, 2019

Out of total households, 93.3% were male and 6.7% of the respondents were female. Majority of male respondents were engaged in crop farming as their main occupation activities. And also 6.7% of the respondents were female engaged in livestock keeping.

**Table 2: Age structure of households.**



S. No.	Male age of the Households	Number of the Respondent	Percentage
1	Below 30	5	10
2	31-40	26	43.3
3	41-50	20	33.4
4	Above 51	9	13.3
<b>Total</b>		<b>60</b>	<b>100</b>

Source: own computation from primary data, 2019

The result of household's survey showed that the mean age of the households head was 45 years in the occupational activities. The mean age of male respondents grouped in the four (4) categories. Those who are below 30 years of age were 10%, those between 31-40 years of age were 43.3%, those between 41-50 years of age were 33.4%, and those above 50 years of age were 13.3%. The result also revealed that older age respondents are mostly represented in crop farming occupational cropping.

## 4.2. Educational Status of Respondents

Table 3: Educational status of respondents

S. No.	Education Level	Frequency	Percentage
1	Illiterate	17	28.3
2	Read and Write	24	40.0



3	Primary School	10	16.67
4	Secondary School and above	9	15.0
<b>Total</b>		<b>60</b>	<b>100.0</b>

Source: own computation from primary data, 2019

Educational status is one of the factors that affect productivity of smallholder farmers. Table 28.3 shows that the mean crop productivity of illiterate and literate households were 12.6 and 31.8 .This indicates that as people educate more, they aware about institutional credit and become more productive.

The educational status of the male respondents indicates that about 18.9%b of respondents can read and write, and about 81.1% of the respondents cannot read and have had inadequate farming experienced.

The educational status of female respondents that can be read and that cannot be read slow below about 20% of female respondents were can read and about 80% of the female respondents were can not read, this implies that female respondents cannot adequate information on farming.

The formal education years of the respondents grouped in to three: those between 1-6 of the respondents were 38.9%, those between 7-12 of the households respondents were 51.6% and about 9.5% of the households respondents were above 12 years of grading. This shows that the respondents have so much widely understanding in provision of institutional credit and have modern understanding in the farming activities.

Table 4: Existence of hired labor

S. No.	Hired labor on farming	Number of respondents	Percentages
1	Yes	15	25



2	No	45	75
<b>Total</b>		<b>60</b>	<b>100</b>

Source: own computation from primary data, 2019

Labour is one factor of production, about 25% of the households respondents were hired labor on farming activities and 75% could not hired labour on farming activities. This shows that the farmers cannot get enough credit from the institutions. On the gathering farming activities. This shows that of the farmer products become low or high, this lead to get more/low access getting credit.

Table 5: Labor availability during peak periods

S. No.	Shortage of Labour/Peak Period	Number of respondent	Percentages
1	Yes	55	91.67
2	No	5	8.33
<b>Total</b>		<b>60</b>	<b>100</b>

Source: own computation from primary data, 2019

Among 60 the sample households, 91.67% of the respondents agreed that there were shortage of labour during peak period. This shows that because of the households children goes to education, the shortage of labour exist and this problem can overcome through mutual aid team or debo and hiring daily labour.

### 4.3 Descriptive analyses of the data

Table 6: The effect of credit on smallholder farmer’s productivity

S. No.	Households access to Credit	Mean Productivity (in
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		<b>Quintals)</b>
1	Have no access to credit	14.7439
2	Have access to credit	37.53846
<b>Total</b>		<b>17.86316</b>

Credit plays important roles for agricultural productivity. Table 4.2.1 shows that the mean productivity of non-access to credit household was 14.7 and who have access to credit were 37.5. This shows that as institutional credit is expand in smallholder farmer’s community people take more credit and those who take more credit were more productive.

Table 7: the effect of marital status on agricultural productivity

S. No.	Marital status	Mean productivity
1	Single	9.72
2	Married	20.77143
<b>Total</b>		<b>17.86316</b>

Table 4.2.3 shows the mean of household married and not married (single). This means the mean crop productivity of married households were found to be 9.72, whereas that of not married households was 20.8. This indicates those married households were participating in crop production and become more productive than unmarried households.

Table 8: The effect of household’s wealth status on agricultural productivity

S. No.	Wealth status	Mean productivity	
1	Very poor	6.25	



2	Poor	18.28767	
3	Rich	43.66667	
<b>Total</b>		<b>17.86316</b>	

Table 4.2.4 shows the wealth status and mean crop productivity of households. This means households who were poor of the poor has a mean value of 6.25 quintals and households were poor has a mean crop productivity of 28.28quintals and households who were found to be rich has a mean crop productivity of 46.66 quintals. This shows that rich households were take credit more than poorest households and obtain more ability to produce efficiently.

#### 4.5. Pattern of credit use

Table 9: Conditions of credit use

S. No.	Are you getting Credit Service?	Number of respondent	Percentages
1	Yes	43	71.67
2	No	17	28.33
<b>Total</b>		<b>60</b>	<b>100</b>

Source: Researchers’ own computation from primary data, 2017

About 71.67% of respondents have accessed to credit from the institution, the average amount received loans is 5000birr, and about 28.33%of the respondents were not having access to getting credit in the study area.

Table 10: Source of credit

S.	Sources of Credit	Number of	Percentages
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No.		respondent	
1	Agricultural office	17	28.33
2	Amhara Credit and Saving Microfinance	40	66.67
3	Commercial bank	3	5
<b>Total</b>		<b>60</b>	<b>100</b>

Source: own computation from primary data, 2019

Agricultural office, Amara credit and saving micro finance, commercial bank of Ethiopia were the important sources of credit in the study area. About 28.33% of the respondents were getting credit from agricultural office, about 66.67% were from Amhara credit and saving micro finance, and about 3% of respondents were getting credit from commercial bank of Ethiopia

Table 11: The purpose of credit

S. No.	Purpose of credit	Number of respondents	Percentages
1	For livestock	5	8.33
2	For purchasing agricultural Inputs	40	66.67
3	Production	10	16.67
4	Consumption	5	8.33
<b>Total</b>		<b>60</b>	<b>100</b>

Source: own computation from primary data, 2019

Credit can be used for the purpose of production, consumption, and livestock raring and for agricultural inputs. About 8.33% of credit from these sources was used livestock raring. About 66.67% of respondents used credit for the purpose of purchasing agricultural inputs, about 16.67% of respondents available for production and 8.33% of respondents for the purpose of consumption.

Table 12: Terms of credit

S. No.	Terms of credit	Number of respondent	Percentages
1	Short term	56	93.33
2	Medium	4	6.67
<b>Total</b>		<b>60</b>	<b>100</b>

Source: own computation from primary data, 2019

All the farmers in the study area took credit in the form of short term and medium term methods. About 93.33% of the respondents were getting or took loan in the form of short term and about 6.67% of the respondents took loan in the farm of medium term methods.

Table 13: Adequacy of credit received

S. No.	Was credit received adequate	Numbers of respondents	Percentages
1	Yes	30	50
2	No	30	50
<b>Total</b>		<b>60</b>	<b>100</b>

Source: own computation from data, 2019

About 50% of the respondents reported that they obtained the amount of the credit they requested and about 50% of the respondents did not get adequate credit they requested.

#### 4.6. Change attributed to credit use

Table 14: the effect of credit taken



S. No.	Is there change after taking credit?	Numbers of respondent	Percentages
1	Yes	46	80
2	No	14	20
<b>Total</b>		<b>60</b>	<b>100</b>

Source: own computation from primary 2017

About 80% of respondents reported that they were benefited from credit intervention, through different sources. They were many improvements to the beneficiaries by credit intervention .most of them mentioned that they received multiple benefits from credits. About 20% of respondents reported that they where no change after taking credit. This implies that their income is low, nutritional status of the family is not improved.

Table 15: the use of profits obtained from credit

S. No.	After change they observed	Number of respondent	Percentages
1	Able to built to better house	6	11.6
2	Able to buy land	34	35.8



3	Able to save more	7	7.4
4	Able to buy livestock	13	45.2
<b>Total</b>		<b>60</b>	<b>100</b>

Source: own computation from primary data, 2019

About 11.6% of the respondents report that they were benefited after taking credit in order to build a better house, about 35.8% of respondents was able to buy land. About 7.4% of respondents were able to save more and about 45.2% of the respondents were able to buy livestock. The shows as the farmers able to increase their income. Send their children to school and improve the nutritional status of the family

#### 4.7. Constraints to save and invest

Table 16: Cash savings and its constraints

S. No.	Effects to save and Constraints	Number of respondents	Percentages
1	Natural disaster	25	60
2	Extended family obligation	24	25.3
3	Limited market Opportunity	11	14.

Source: own computation from primary data, 2019

Farmers face many problems, However, Natural disaster in the study area (like poor rainfall distribution, disease, frost, etc). About 25.3% were the main problem faced in increasing production and income of the households, about 60% of respondents labored that natural disaster was the main constraints reported that extended family obligation say the main constraints, about 14% of the respondents reported that limited market opportunity as the main constraints to save and invest.

#### 4.8. Output income and cost of production of crops.

Table 17: types and selling prices of major crops

S. No.	Crop production	Selling price	No of respondents	Percentages
1	Khat	1500birr/kg	15	36
2	Sorghum	600birr/qt	20	32
3	Potato	450birr/qt	14	15
4	Maize	400birr/qt	11	17
<b>Total</b>			<b>60</b>	<b>100</b>

Source: own computation from primary data, 2019

The households' income obtained from farm activities. The detailed data obtained directly from the sample households showed that institutional credit is the major source of income for farmers. Output of farmers was valued at farm gate price at harvesting time. About 66.7% of respondents were getting 1500 birr/qt from khat, about 4.4% of respondents were getting 600 birr/qt from sorghum, about 13.3% of respondents were getting 450 birr/qt from potato b and about 15.6% of respondents were getting 4000 birr/qt from maize, his implies that the source for producing more output is credit even for the cost of getting fertilized and improved seeds.

## 5. Conclusion

There is no economic sector other than agricultural that could be a base of Ethiopia development; small farmers are the most dominant participant in agricultural sector.

Smallholder farmers in Ethiopia, as in many developing countries, lack finance to purchase productive agricultural inputs, with the exception of family labor and local seeds, almost all inputs required in agricultural production age to be purchased, however, the majority of Ethiopia population enterprises small farmers.



Who cannot implement a technology without external funding therefore, the present study was focused on effects of institutional credit on smallholder farmers' productivity and to assess the effects of credit on small farmers 'income. The agricultural credits users are economically better in terms of food consumed, the house hold income, the household diet, education of children and access to health, credit uses are better than non-users.

The finding of research indicates that financial services to the poor farmers would improve their livelihood enabling them to purchase agricultural inputs. Micro finance programs assist credit recipients to increase and stabilize their income, generate additional assets and provide access to better nutrition, medical and educational services, thus micro financing services play vital role in eradication of poverty in rural Ethiopia. In general the study revealed that credit users are in better position; however credit was not adequately extended and not given to all activities as package. It is probably because of inadequate source of credit, untimely supply of credit, lack of extension service, problems of infrastructures and others.

## **5.2. Recommendations**

- Fertilizer loan and improved seed loan appears to be the possible areas of extending, credit. As they can increase gross farm income among small farmers? Therefore such case of credit needs should be assessed and provided to farmers by credit institutions.
- The above suggestion necessarily leads to increase the lending service and require bankers understanding of agriculture. Therefore, better management skill and skilled manpower are necessary.
- It is retesting that the borrowers and lenders have close relationship and hence credit institution can play greater role by considering the attitudes of farmers to ward change the attitudes of farmers toward change. Therefore, agricultural policy should give sufficient attention to rural credit policies.



- The means of production like fertilizer, improved seeds and oxen which are very important to the farmers should be available at proper time, proper place, and at reasonable price.

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