

## THE ROLE OF MICRO AND SMALLSCALE ENTERPRISES IN POVERTY REDUCTION: THE CASE OF DUGDA DEWA WOREDA FINCHAWA TOWN SOUTHERN ETHIOPIA

Lemessa Guyasa<sup>1</sup> & Haile Tamiru Urgessa<sup>2</sup>

<sup>1</sup>Research Scholar, Department of Agricultural Economics, Wollega University, Ethiopia

<sup>2</sup>Lecturer, Department of Agricultural Economics, Bule Hora University, Ethiopia

### ABSTRACT

Micro and Small enterprises play significant roles in the creations of employment opportunities and generations of income. Developing countries have common characteristics of low economic growth, fast population growth, high level of unemployment and poverty. The general objective of this study is to analyze the role of micro and small enterprise in poverty reduction. In addition, secondary sources of data have also been used. A logistic regression model was employed to determine the factors influencing poverty in the town with the probability participation used as a dependent variable and a set of demographic and socioeconomic factors as the explanatory variables. Poverty is a multifaceted multifaceted and multi-dimensional concept. Currently, in most developing countries, micro and small enterprise work closely with the poor to deal with poverty but the results have not been good enough. The role of MSEs in employment creation and income generation for the poor, the Ethiopian government is advocating for the importance of these enterprises for enhancing development and growth by identifying youth and women as a target group for relevant support extent. Based on these findings, the researchers recommended that emphasis should be given towards strengthening different educational opportunities access of credit, extension service, saving, government agricultural offices with nongovernmental organizations should work to reducing poverty.

**KEYWORDS:** Poverty Reduction, Micro and Small Enterprise, Employment Creation

---

### Article History

**Received: 12 Apr 2021 | Revised: 23 Apr 2021 | Accepted: 26 Apr 2021**

---

### INTRODUCTION: BACKGROUND OF THE STUDY

Micro and Small enterprises (MSEs) play significant roles in the creations of employment opportunities and generations of income for quite a large proportion of the population all over the globe. The study conducted in Africa by the ILO finds that only 20% of the total populations of working age group in many African countries were reported to have been working in the micro and small enterprise sector (ILO, 2003).

Nowadays, there are multi-dimensional problems like extreme poverty, unemployment, low per capita income, and unequal income distribution facing in many developing countries. As a result, different governments are framing different strategies and policies to create job opportunities and to pull these countries out of their problems. One strategy as to create jobs and accommodate maximum number of citizens has been emerged, i.e., the establishment of MSEs. (Ermias, 2011).

Like many developing countries, Ethiopia is also suffering from severe poverty, unemployment, income inequality and lower per capita income. In response to the mentioned problem, and also by recognizing the significance of this sector, the Ethiopian government issued the National Micro and Small Enterprises Strategy in 1997 and established the Federal Micro and Small Enterprises Development Agency in 1998. The country's industrial policy in 2003 and the poverty reduction strategy program of 2006 have singled out MSEs as major instruments to create a productive and vibrant private sector and reduce poverty among urban dwellers (Ephrem, 2010; MOFED, 2006; Moti 1997).

Micro and small scale business enterprises are seen as the most important alternative sector in fostering socio-economic developments in both developed and developing countries. Particularly, they make undoubtedly a huge contribution to employment in many developing countries where there is a challenge of high unemployment and poverty exists. Several studies reveal that MSEs in these countries are considered as crucial in employment creation and generally contribute to economic growth as an engine of development and vehicle towards fulfilling the Millennium Development Goals. Chief among these goals is the reduction of poverty through creating employment, wealth and improvement of living standards, because poverty and unemployment rate are considerably higher in these countries than developed countries (Abiyu 2011).

The Growth in MSEs has been found to have a link with economic growth and poverty alleviation. In order to generate enough income to help minimize the incidence of high level poverty in most developing economies, international funding bodies and economic growth analysts have suggested to policymakers in developing economies to make greater efforts at promoting private sector development with MSEs being at the forefront (Snodgrass & Winkler, 2004).

The role of MSEs in employment creation and income generation for the poor, the Ethiopian government is advocating for the importance of these enterprises for enhancing development and growth by identifying youth and women as a target group for relevant support measures (MOTI, 1997).

Institutionalizing the MSEs is one of the ways to facilitate development and growth condition. Due to this the government take the MSEs as a core development partners and paved the way for the formation of MSEs Development Agency that will facilitate their function and give technical assistance, training at different level (federal and regional).

However, according to Weldegriiel and Admasu (2012) this sector faces lot of constraints such as policy problems, lack or in adequate trainings, lack of credit and loan, lack of working space, poor production techniques and input access constraints, lack of information, inadequate market linkage et c. These problems are highly restricting the contribution of MSEs for socio-economic development. Despite these challenges the MSEs sector contribute much for alleviating the poverty of the participants in the study area, by creating jobs and in return increase their income and fulfilled their basic needs. On the basis of this fact the study was attempt to assess the role that MSEs Play in improving the living standard of the poorer people live in study area.

### **Statement of the Problem**

Developing countries have common characteristics of low economic growth, fast population growth, high level of unemployment and poverty. They provide employment opportunity and income generating scheme to those who do not have access to the formal sector employment. It is also regarded as a tool for supporting the economic and social conditions of the poor, especially for the youth and women, by allowing access to education, health facilities and improves their living standards sustainably. On the other hand, the reviewed empirical studies reveal that there is a gap with regard to assessment

of enterprises' roles in terms of employment opportunities, generating income and profit and reducing poverty. In addition, some reviewed empirical studies with regard to the sector focused on major challenges and constraints (Endalkachew, 2008; Weldegbriel, 2012; Workneh, 2007).

Like many other major Town countries, Bule Hora Town is presently suffering from a host of social and economic problems including widening income disparity, deepening poverty, rising unemployment, severe housing shortage, poorly developed physical and social infrastructure. For this reason, MSEs are recognized by the government as one of the potential sectors to alleviate poverty in the town. The role of MSEs has major issues of reducing poverty, but in the study area there is no research conducted with respect to the participation of MSEs in reducing poverty. Therefore, this study was conducted to evaluate the role of MSEs on the reducing of poverty by comparing MSEs Participant and non-participant households in Bulehora town. There are no empirical studies conducted in the town for examining the role of MSEs on the reducing of household poverty. This study tries to fill this knowledge gap.

The general objective of this study is to analyze the role of micro and small enterprise in poverty reduction. The specific objective of this study was to identify the role of MSEs in improving the income of town member and to identify major constraints that affect MSEs at start up stage and during operation in the study area.

- What are the roles of micro and small scale enterprises in income generation and employment creation?
- What are the challenges of micro and small scale enterprises in the study area?

Therefore, this study is emphasizing to identify the role of MSEs reduce poverty and the constraints that hinder their effectiveness and expansion in the study area and help the government and other actors to focus on the intervention for the fight against poverty. This study will also give some suggestions to the policy makers and strategy designers, implementers and other management bodies for the sake of giving attention to the problems and to arrive at appropriate solutions for existing problems on MSEs and thereby to reducing poverty and this study describe the role of MSEs in reducing poverty and their focus on the issues of doing the target of reducing poverty in Bule Hora in town.

The study describes the role of micro and small enterprise in poverty reduction in Bule Hora town only, it states that the poverty reduction in the different regions of Ethiopia in the case of social welfare, education and health. It was difficult to obtain the reliable data because of there is no documented data or sources of information, lack of reference materials, shortage of finance, time constraints, whether condition and the availability of the respondents.

## **LITERATURE REVIEW**

### **Theoretical Review**

The history of small business has been one of the most controversial stories in economic development in the world. It is not known when MSEs start. The role of small business in an economy has frequently been undermined and misinterpreted this is because that many governments emphasize on the attraction and promotion of large enterprises by thinking that most of the economic development or income comes from large industries.

### **Definition of Poverty**

The conceptualization of poverty and its alleviation has been remained an area of concern for various scholars and development agencies for a number of decades. Numerous authors define poverty in different ways by considering different criteria and indicators of poverty. Some researchers have defined the poor as that portion of the population, that

is, unable to meet the basic nutritional needs. Others viewed poverty as a function of education and/or health using the measurement of life expectancy, child mortality, etc. level of expenditure and consumption are other criteria used to identify the poor. According to Ephraim Setegn, (2010) Urban people in poverty are those without sufficient education, secured employment, stable incomes, savings, proper housing and important networks. They are the people that are vulnerable to changes in demand in the labor market, in prices of basic goods and services, and who cannot afford adequate housing.

### **Definition of Micro and Small Enterprises**

The definition and types of micro and small enterprises differ from country to country and there is no universally stated definition for micro and small enterprises. (Lepi, 2005, Storey, 1995; cited in Demis and Mulugeta (2011)). This is so because the criteria and ways of categorizing enterprises as small, micro and medium varies from country to country and from organization to organization. The absence of such uniform definition of MSEs has created a difficulty. In line with this, for instance, Tegegne and Meheret (2010) argued that the absence of a single or globally applicable definition has made the task of counting the number of MSEs and assessing their impact extremely difficult across countries, though the rationale for most governments to make such definition and categorization is mainly for functional and promotional purposes to achieve the desired levels of development of the sector. Different countries use different points of criteria to distinguish micro and small enterprises from other economic entities within their national boundary.

The major criteria used in the definitions according to Carpenter (2003) could include various combinations of the following: Number of employees, financial strength, sales value, relative size, initial capital outlay and types of industry. For instance, European Commission utilizes three criteria to determine whether an enterprise is a micro or small sized.

These are staff headcount, annual turnover, and annual balance sheet. In European Commission Micro enterprises are defined as enterprises which employ fewer than 10 persons and whose annual turnover or annual balance sheet total does not exceed 2 million euro. Small enterprises are defined as enterprises which employ fewer than 50 persons and whose annual turnover or annual balance sheet total does not exceed 10 million euro (Kushnir et al, 2010).

From Ethiopian context; two different definitions of MSE are used so far. These are: The 1997 definition of MSE development strategy/Ministry of Trade and Industry (MTI), and Definition given by CSA (FMSEDA, 2011). The definition used by Ministry of Trade and Industry (MTI), which uses paid capital or capital investment as a yardstick, has been developed for formulating micro and small enterprise development strategy in 1997 by considering other countries' experience, especially the South Africa experience.

According to the MTI, Micro enterprises are those business enterprises, in the formal and informal sector, with a paid-up capital not exceeding Birr 20,000 (1200 USD) and excluding high tech consultancy firms and other high-tech establishments. Small enterprises are those business enterprises with a paid up capital of above Birr 20,000 (1200 USD) and not exceeding Birr 500,000 (30000 USD) and excluding high tech consultancy firms and other high tech establishments. On the other hand, CSA categorizes enterprises into different scales of operation on the size of employment and the nature of equipment. To CSA, establishments employing less than ten persons and using motor operated equipment are considered as small scale manufacturing enterprises. Enterprises in the micro enterprise category are subdivided into informal sector operations and cottage industries: Cottage and handicraft industries are those establishments performing their activities by hand and using non-power driven machines whereas the informal sector is defined as household type establishments or activities, which are non-registered companies and cooperatives operating with less than 10 persons.

### **Characteristics of MSEs**

Where in Ethiopia, are engaged in different activities. The document prepared by the entitled 'Inception Report on Micro and Small Enterprise Development in Addis Ababa' (2014) reveals that, due to their high employment creation capability, existence of market, short period of return on investment, local raw material utilization, seven sectors are selected for intervention. These are Garment and Textile, Metal and Wood Work, Dry Food Preparation, Construction, cobblestone, Municipal Services, and Urban Agriculture.

Zewde and Associates (2002) identified that the MSE sector is characterized by a number of highly diversified activities, which can create job opportunity for a large segment of the population. The characteristics of the informal sector (small and micro enterprises) have also been described as it is easy to enter, it is financed mainly from personal and family resources, it requires low starting capital, it uses labor-intensive techniques, and it relies on the non-formal school system such as apprenticeship and on-the-job training (cited in demis,2011).

Donald (1999) also identified the following distinguishing features, namely more labor intensive, more efficient, more equitable in distributing the income they generated, geographically more widely diversified, and more nurturing of entrepreneurs.

### **Theories towards Micro and Small Enterprises**

Different theorists followed different perspectives on the development of Micro and small scale enterprises. According to Tambunan (2006), two theories were developed. These are the classical and the modern theories. The Classical theory - states that poverty and the importance of MSEs Development correlate positively. In the course of rapid economic development, the economic share of MSEs declined; while those of large and medium enterprises dominate the economy. In other words, the higher the proportion of people living in poverty, the more will be the contribution of MSEs in reducing poverty. This theory however, is criticized for neglecting the economic growth of MSEs through networking and clustering, agglomeration. It only focused on the relationship between levels of income and the growth of MSEs. Because of these short coming of the theory, the modern view was developed in 1980s.

The Modern Theory- postulates that the major reason for the emergence of the notion of flexible specialization was the long debate of how to interpret the new global pattern of production caused by globalization forces and industrial restructuring. Global production had transformed from mass to individual production system and flexible specialization is the result of this debate.

Hence, Tambunan (2006), shows that the modern theory have three characteristics; Flexible and Specialization - firms in the community form part of a bounded community which outsiders are largely excluded. High level of competitive innovation - there is a continuous pressure on firms in the community to promote innovation in order to keep an edge of their competitors and; High level of cooperation - there is a limited competition among firms in the community over wages and working conditions encouraging greater cooperation among them.

In general, according to Tambunan (2006), the flexible specialization on MSEs states those MSEs grow faster than large enterprises with the process and are important source of invention, efficiency and innovation. They are also capable of standing the competition with large enterprises. Hence, in the courses of development, the economic share of MSEs increases or in other words, MSEs contribute a lot for poverty alleviation; while, it declines in the classical theories.

The other theory, the dependency or dominance theory, views that micro and small enterprises can survive either in direct dependency on large enterprises, as subcontractors to them, or as petty producers and traders operating in extremely competitive markets with little possibility for growth and accumulation of capital to invest (Demis2011).

### **The Role of Micro and Small Enterprises in Poverty Reducing**

By now it is clear and agreeable that poverty, both in urban or rural areas, is all about lack of basic needs, health care, clean water, sanitation, education and low or inadequate level of income and consumption, and poor common over resources.

Before reaching in to such multifaceted understanding of the concept of poverty, poverty was viewed in terms of level of income in the late 1950's and 60's. Then onwards, however, the trend of defining it begun to incorporate other non-economic aspects. Likewise, on the other hand,

according to Green et al (2006), one important innovation, since the late 1980's and early 1990's, in development research and policy has been the refocusing of the goals of development strategy from an exclusive concern with economic growth to 'growth with poverty reduction' through MSE development. Again during these decades, the role played by MSEs, through the various socio-economic benefits emanating from the sector, was found to be eminent in the overall development effort and process of nations. In other words, by generating larger volumes of employment as well as higher levels of income, the SMEs will not only have contributed towards poverty reduction, but they will also have enhanced the welfare and standard of living of the many in the society Mulugeta (2011).

As shown above, central to the problem of poverty is the availability of work. Work, secured either as owner or employee in MSEs, allows people to produce for themselves (i.e. food) and earn the money needed to buy goods and services. In this point poverty reduction can be correlated with job creation.

According to Vandenberg (2006), it is also from work that wealth is created which, through taxation, allows governments to fund pro-poor services such as health care, clean water and education.

Currently international thinking is also with a view that acknowledges SMEs as a tool to fight poverty in the long run. The ILO's approach to poverty reduction through small enterprise development is based on the promotion of the four elements of decent work, namely, productive, remunerative employment; rights at work; social dialogue; and social security. This strategy focuses on the needs of poor people who are part of the micro and small enterprise economy, as owner/operators and workers, as their dependents', as the unemployed who may benefit from job creation, and as customers. While further consolidating the above-shown approach, Vandenberg (2006) suggested that the ILO's existing strategy for poverty reduction through small enterprises must emphasize the fact that Small enterprises make a positive contribution to poverty reduction when they provide employment, adequate levels of job quality, and low-cost goods and services used by the poor; entrepreneurship, combined with productivity increase, is a key ingredient for poverty reduction through small enterprise development; and vibrant enterprises, competitive markets and a fair globalization can make a significant impact on poverty reduction.

The micro and small enterprises sectors have also unquestionable importance for women. According to World Bank (2007), most women are not found engaged in outdoor employment opportunities in Ethiopia. They are deprived from higher decision-making positions, equality of inheritances, decent works and other economic activities in developing countries in general and in Ethiopia in particular. As a result, since MSEs are started with low financial capital and credit and have the capacity to absorb huge low-level income populations, they can help women to have easy access to



employment and be the owner of the enterprises. Their income earning capacity can increase gradually and contribute a lot for their families. They can also emerge out of their traditional roles, get ample experiences from their work places, and further educate themselves.

As a result, different study shows that MSEs are important means in poverty alleviation through employment creation and income generation for low-income groups with limited opportunities. They do have the capacity to increase the level of income of individuals and to improve the living standards of the larger poor because they need low startup capital and their potential to absorb the huge proportion of the uneducated or the low educated work force, which is the reality in the poor countries like Ethiopia.

## **Empirical Review**

### **Studies on the Ethiopian MSEs Sector**

In Ethiopia, the MSE sector has high capacity in absorbing high labor force; this is because the sector is characterized by diversified activities. Due to its contribution for alleviating the poverty of the low income people and of course with a number of constraints micro and small enterprises get the attention of many researchers.

Accordingly, Daniel (2007) with having an objective to assess the impact of group-based MSEs on poverty alleviation conducted a research in Nekemte city of the Oromia Regional State of Ethiopia.

Getahun (2009) carried out a research impact of MSE intervention on urban poverty reduction by examining the level of employment creation, change in income and living standard of the beneficiaries in terms of education, health, household assets and clothing. The study found out that the studied MSEs have created a permanent and temporary employment opportunity. The income and expenditure of the beneficiaries of the MSE program has shown an increment, according to the study. The respondents believed that their engagement in the MSEs has resulted in an improved health and clothing, and increased ownership of basic household assets such as table, chair, bed, radio and tape recorder. And also identifying lack of finance, inadequacy of production space and lack of training as bottlenecks that hinder the poverty alleviation role of MSEs. Studies were also conducted specifically with a purpose of identifying the problems that MSEs encounter.

Mulugeta (2011) in his study entitled the livelihoods reality of micro and small enterprise operators identified and categorized the critical problems of the MSEs in to market -related problems, which are caused by poor market linkage and poor promotional efforts; institution related problems including bureaucratic bottlenecks, weak institutional capacity, lack of awareness, failure to abide policies, regulations, rules, directives, absence of training to executives, and poor monitoring and follow-up ; operator-related shortcomings like developing a dependency tradition, extravagant and wasting behavior, and lack of vision and commitment from the side of the operators; MSE-related challenges including lack of selling place, weak accounting and record keeping, lack of experience sharing, and lack of cooperation within and among the MSEs; and finally society-related problems such as its distorted attitude about the operators themselves and their products.

By Primarily relying on 200 MSEs chosen from four major cities of Ethiopia namely Adama, Hawassa, Bahirdar, and Mekelle, and taking a sample survey of 557 operators ,Tegegne and Meheret (2010) were conducted research with the intention of assessing the contribution of the MSE strategy to poverty reduction, job creation and business development. The researchers indicated that the national urban development policy is the root of the MSE program and strategy; and MSEs are of the five pillars of the urban development package of the urban development policy. According to them, the government of

Ethiopia planned, via its MSE program, to create employment opportunities for about 1.5 million urban residents by availing services such as provision of credit and premises, business development services, market linkages and equipping MSEs with appropriate modern machineries and equipments. On the other side, the same writers concluded that MSEs provided job opportunity, hence increased income for a remarkable number of unemployed urban dwellers especially the youth.

In general, the reviews from different studies informed that MSEs face many problems but they have economic, social and political significances that they need special attentions to make them efficient and so that they may contribute a lot for development endeavors of developing countries in general and in Ethiopia in particular. So, MSEs have great potential to achieve the desired development and to alleviate poverty and unemployment.

## **METHODOLOGY**

### **Description of the Study Area**

The research was conducted in Dugda Dewaworeda West Goji Zone of Oromia Region of Ethiopia. The town is located in 517 km far from Addis Ababa. According to the information of Finchawa Chief Administration Office of Transformation Plan (HCAOTP, 2011), it lies at an altitude of 1670m up to 1870m above sea level and it receives an annual rainfall of 725mm with an average temperature of 21.89 °C. The climatic condition of the study area is weynadega9%, dega35%, and kola56%. In kola 276.674hectar, in weynadega 98884hectar and in dega1612hectar are cultivated lands. It has four types of soil known as Chronic, Eutric, Xena, Classic and Cambisol. The main production system in the Woreda is agriculture on the production of cereals (such as sorghum and teff), fruits and vegetables'. In addition to farming, they are engaged in small scale commercialization to receive additional income, manufacturing, service sector etc.

There are 8120 total populations in 01 Kebele. From the total population the number of female's are 3025 and 5095 are males. They were get benefits from the contribution micro and small scale enterprise. The numbers of household in the 01 kebele are 315; from this household 95 are females head household 220 are males.

### **Study Design**

This study uses survey method that involves sampling. Survey design was more appropriate to this study which incorporates questionnaire and key informant interview in the study area. The research design to report the research was been uses qualitative and quantitative method.

### **Source of Data**

The study used both primary and secondary data .The primary data was obtained through questionnaire and interview; while secondary data was collected from books, journals articles and different reports on human population, agro-ecology, and land use pattern, topography, slope type, and climate was gathered from Zonal and district Agriculture and Rural Development offices

### **Sampling Technique and Sample Size**

The sampling technique of household was selected by using multistage sampling technique. Bule Hora town is selected randomly based on its chronic poverty problem in Weast Guji zone. In the second stage, 01 kebele is select randomly from four Kebele where MSEs were operating. In this study, at final stage, households both from participants and non-participants of MSEs are selected by using random sampling technique proportional to the number of households from the sample kebele. Appropriate sample size is determined from both participants and non-participants (Yamane, 1967).



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

Where,

- n= Sample size
- N= Total size of target population
- e= Level of precision (error level) at 91% confidence level (0.09)

On average there are 315 household heads in 01 kebele and 5 % desired significance level; the appropriate sample sizes will 88 households.

$$n = \frac{315}{1 + 315 (0.09)^2}$$

$$= 88$$

### Source of Data and Method of Data Collection

The study has use both primary and secondary data to find relevant information concerning about the topic. The primary data was conducted through qualitative and quantitative data gathering techniques to get the available source of data. The qualitative data was collected through personal observation and interviewing while the quantitative data was collected through semi-structured, interview and questionnaires. The secondary source of data is published or unpublished material, website and other relate documents. The interview schedule and the questioner were questions related to socio-economic, demographic and institutional characteristics of household's information.

### Descriptive Statistics

Descriptive statistical method of interpretation was been used for data collect from household survey. Percentages, means, standard deviations and level of significance tests were used, along with econometric models, to analyze the collected data.

### Econometric Models

A model is a simplified representation of a real-world process. It should be representative in the sense that it should contain the salient features of the phenomena under study. In general, one of the objectives in modeling is to have a simple model to explain a complex phenomenon. Such an objective may sometimes lead to oversimplified model and sometimes the assumptions made are unrealistic. In practice, generally, all the variables which the experimenter thinks are relevant to explain the phenomenon are included in the model. Rests of the variables are dumped in a basket called "disturbances" where the disturbances are random variables. This is the main difference between economic modeling and econometric modeling. This is also the main difference between mathematical modeling and statistical modeling. The mathematical modeling is exact in nature, whereas the statistical modeling contains a stochastic term also. An economic model is a set of assumptions that describes the behavior of an economy, or more generally, a phenomenon

### Logit Model

The advantage of this model is that the probabilities are bounded between 0 and 1. The dependent variable is dichotomous, taking two values, 1 if an individual participate in the program and 0 otherwise.

The mathematical formulation of logit model Gujarat (2004) is as follows:

$$P_i = \frac{e^{Z_i}}{1 + e^{Z_i}}$$

Where

- $P_i$  The probability of participation for the  $i^{\text{th}}$  household and it ranges from 0-1
- $Z_i$  Is a function of n-explanatory variables which is also expressed as
 
$$Z_i = \beta_0 + \sum \beta_i X_i + U_i$$
- $i = 1, 2, 3, \dots, n$
- $\beta_0$  = intercept
- $\beta_i$  = regression coefficients to be estimated or logit parameter
- $U_i$  = A disturbance term, and
- $X_i$  = Participating households' characteristics
- $Z_i$  = Clients participation

The probability that a household belongs to non-participant is:

$$1 - P_i = \frac{1}{1 + e^{Z_i}}$$

Therefore, the odds ratio can be written as:

$$\frac{P_i}{1 - P_i} = \frac{e^{Z_i}}{1 + e^{-Z_i}} = e^{Z_i}$$

Now  $\frac{P_i}{1 - P_i}$  is simply the odds ratio in favor of participating in the program service. It is the ratio of the probability that an individual would participate in the program to the probability that he/she would not participate in the program service.

Finally, taking the natural log of equation (4) we obtain:

$$L_i = \ln \left[ \frac{P_i}{1 - P_i} \right] = Z_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n$$

Where

- $P_i$  is a probability of being participated in the program
- $Z_i$  is a function of n explanatory variables ( $X_i$ ) which is also expressed as:

$$Z_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n$$

Where

- $\beta_0$ , is an intercept,  $\beta_1, \beta_2, \dots, \beta_n$  are slopes of the equation in the model
- $L_i$  is log of odds ratio, which is not only linear in but also linear in the parameters,
- $X_i$  = Pre-intervention characteristics of the an individual in the study area,

If the disturbance term ( $U_i$ ) is introduced the logit model becomes:

$$Z_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n + U_i$$

### Dependent Variable

The studying of the dependent of one variable on more than one explanatory variable is refers to as dependent variable. The role of MSEs (participation) depends on the independent variables. The dependent variable is of dichotomous nature representing the observed status of the MSEs Participation on poverty reducing. It is represents in the model by a value of 1 if a given household participate in MSEs and 0 otherwise.

### Independent Variables

The explanatory variables, which are expected to have associations with the participation of the households in MSEs in the study area. The major explanatory variables that are influencing and affecting poverty status of the households to be participant and non-participant. The explanatory variable list below.

#### Age of Household (AGHH)

Age is continues variable measured in year. It is the factors that determine decision of a person. Age also shows a significance relation with an income but the relationship is negative indicating that the increase in the age of operators affects income of them. Younger people are more energetic, motivated and interested than older people and hence they might become successful in their business (demise, 2011). In study was hypothesized age is affect the role of micro and small scale enterprise in reducing poverty positively.

#### Education of Household (EDUHH)

It is a Dummy variable, 1 literate, 0 otherwise. The higher the education level, the better would be the knowledge of the person about poverty reduction. Education and skills are needed to run micro and small enterprises. King and McGrath, (2002) in their study suggest that those with more education and training are more likely to be successful in the SME sector. Then study was hypothesized education affect the role of micro and small scale enterprise in reducing poverty reducing positively.

#### Family Size of Household (FSHH)

It is a continuous variable that refers to the number of family members of a given household. When family size increases, their income also increases. This could be due to the number workers increased in the business enterprises so that it adds value in to their income increment (demise, 2011). So we expect family sizes with role of MSEs reducing poverty have positive relationship.

### **Amount Saving Household (SAHH)**

Saving is continuous variable measured by birr. Saving is a basic instrument in the improvement of income growth of life and in the poverty alleviation effort as it helps to smooth consumption. It is also usually the entry point for a potential user in interacting with financial service providers. When individuals have saved some amount of money, the income growth of MSEs becomes improved, More saving money would mean more capital that enhances the operation of the sector (Demise, 2011).The study was expected saving with role of MSE reducing poverty have positive relationship.

### **Access to Extension Service (ACXSER)**

It is a dummy independent variable if it exist one and zero if it does not exist. It delivers information rearguing production technology, health care or working habit and resource utilization to the farmers King and McGrath, (2002). The study was expected Access to extension service have a positive relation with the role micro and small scale enterprise in reducing poverty.

### **Access to Technology (ACCTEC)**

It is a dummy variable that takes a value of 1 for those people who use the technology and 0 otherwise. It is expected that having experience of using different technologies that could enhance or increase profit of person in MSEs can have positive effect on their profit then reducing poverty. We expected that access to technology have positive Relation with role micro and small scale enterprise in reducing poverty.

### **The Amount of on-Farm Income (ONFHH)**

It represents the amount of farm household annual income generated from on-farming activities. It is a continuous variable. The higher the amount of annual income might reflect households' strategy of improving its agricultural production and productivity to secure the household basic needs and gradually to change the household members' life style sector (Demise, 2011). We expected that the amount of on-farm income have positive relation with role micro and small scale enterprise in reducing poverty.

### **Distance from the Market (DIMKT)**

It is the continuous independent variable measured in kilometer. Due to the far distance of transportation the MSEs center constructs a road facility. Rural communities in remote area suffer from lack of transportation facilities. The closer to the market the lesser would be the transportation cost and time spent King and McGrath, (2002). In the study was hypothesized that Distance from the market have negative relation with role micro and small scale enterprise in reducing poverty.

### **Participation in Off- /Non-Farm Employment (NONFHH)**

This is a continuous variable which representing the participation in off/non-farm employment. The presence of off farm employment and ability to generate additional income from off farm employment had a positive association with household hood security status. Therefore, income earned from off/non-farm activities is an important variable which determines household food security status in the study area. In the study was hypothesized that Participation in off- /non-farm employment income have positive relation with role micro and small scale enterprise in reducing poverty.

**Table 1: Type, Definition, Measurement, and Hypothesis of Variable**

Variable	Definition	Type	Measurement	Hypothesis
Dependent				
RMESs	Role MESs	Dummy	1=participate,0=non participant	
Independent				
AGHH	Age of house hold	Continuous	Year	+
EDUHH	Education of HH	Dummy	1=literate,0=otherwise	+
FSHH	Family size of HH	Continuous	Number	+
SAHH	Saving of household	Continuous	Birr	+
AMCRDTR	Access of Credit Received	Dummy	1=credit user,0=otherwise	+
ACXSER	Access to extension	Dummy	1=training,0=otherwise	+
ACCTEC	Access of technology	Dummy	1=user ,0=otherwise	+
ONFHH	The amount of on-farm	Continuous	Birr	+
DIMKT	Distance from the mkt	Continuous	Kilometer	-
NONFHH	The amount of non-farm income	Continuous	Birr	+

In this chapter the role of micro and small enterprise on poverty reducing is included with findings from descriptive and logistic model analyses are presented and discussed. The variables included in the model are defined in each of the following tables. Before discussing the econometric results, some descriptive statistics are presented.

## RESULTS AND DISCUSSION

### Descriptive Analysis Result

The descriptive analyses tools used are mean, percentage mean, mean difference and standard deviation. The descriptive statistics was run to observe the distribution of the independent variables. The socio-economic and institutional characteristics of the respondents such as age, level of education, family size, saving of household, access of credit, access of technology, access to extension service, distance to market, amount of on farm income ,amount of non-farm income were analyzed of the total sample respondents 32 were non participant and 56 were c participant-statistics and chi-square ( $\chi^2$ ) tests were used whether they are statistically significant or not using t-statistics and chi-square ( $\chi^2$ ) tests. The t-test is used to test the significance of the mean value of continuous variables of the two groups of participant and nonparticipant and chi-square ( $\chi^2$ ) is used to test the significance of the mean value of the potential discrete (dummy) explanatory variables.

**Table 2: Summery of Descriptive Statistics Result of the Dummy Variables by using chi 2**

Variable		Participant		Non Participant		Chi2 Value	p-Value	
		Frequency	Percent	Frequency	Percent			
EDUHH	LITRATE	43	48.86%	11	12.5%		15.4490	0.000
	IILITRATE	13	14.77%	21	23.86%			
ACXSER	Non user	29	32.95%	14	15.9%		0.5262	0.468
	User	27	30.68%	18	20.45%			
AMCRDTR	Exist	18	20.45%	19	21.59%		6.1974	0.013
	Non exist	38	43.18%	13	14.77%			
ACCTEC	User	40	45.45%	17	19.32%		2.9899	0.084
	Non user	16	18.18%	15	17.45%			

Source: Own Survey 2020

### Education of Household

Education improves and increases the level of human capital which in turn increases labor productivity and earning. Since labor is by far most important asset of the poor, increasing education of the poor will tend to reduce poverty. The literate people were more important than illiterate to poverty reducing. Therefore, table 4.1 revealed that about 61.36% and 38.63% literate and illiterate of the household headed respectively. The chi-square test indicates that there is a significant difference between the two categories of respondent at 1% significance level in their education. Therefore, the result shows that as the education level household increase there is a significant reducing poverty.

### Access to Extension Service

Out of the total respondents 51.13% those were the extension service user while the remaining 48.87 were service nonuser. From table 4.1 the extension service users are higher than from non-user. Therefore, the chi-square test indicates that the statistical significant difference on access of extension at 5% level.

### Access to Credit

Though capital is important to micro and small enterprise to poverty reducing. The degree of importance varies among actors. Out of the total sample 42.04% and 57.96% access of credit exists and access of credit not exists respectively. The chi-square test indicates that the statistical significant difference on source of credit at less than 1% level as shown on table 4.1 above.

### Access of Technology

Out of the total respondents 64.77% those were the technology user while the remaining 35.23% were technology non user. The chi-square test indicates that there is a significant difference between the users and nonuser of respondent at 10% significance level in their in poverty reducing as shown above 4.1 tables.

**Table 3: Summary of Descriptive Statistics Result of the Continuous Variables by using t-test**

Variable	Category	Mean	Mean Difference	Stand. Error	t-Value
SAHH	0	585.625	-469.8214	58.71542	-1.0863
	1	1055.446		273.033	
AGHH	0	42.0625	-5.669643	1.199746	-3.6809
	1	50.73214		0.9409484	
ONFHH	0	4447.656	1475.924	576.193	1.5472
	1	2971.732		640.696	
DIMKT	0	3.46875	-0.5491071	0.3299083	-1.3661
	1	4.01787		0.2383835	
NONFHH	0	1304.469	-420.692	748.6326	-0.2960
	1	1725.876		983.7286	
FSHH	0	3.375	-0.3214286	0.2322315	-1.0863
	1	3.696429		0.1800426	

Source: Own Survey 2020

### Saving of Household

Saving is a basic instrument in the improvement of income growth of life and in the poverty alleviation effort as it helps to smooth consumption. It is also usually the entry point for a potential user in interacting with financial service providers. Therefore, in the above table 4.2 shows that the of participant was 1055.446 and mean non-participant 585.625, the mean difference -469.8214



### **Age of the Household**

When the age of the household increase, their potential to productivity is increase. Due to age increase, the productivity of the individual increase and the individual has high savings to compensate for the increase of productivity and income. The welfare rises with age as more human capital, both from education and experience, has been accumulated through years. The mean of non- participant 42.0625, the mean of participant 50.73214 and the mean difference is -5.669643. Then above table states that, the age of house hold was statistically significance with positive influence of the poverty reducing.

### **On Farm Income of the House Hold**

This variable includes both the production of animal rearing and cultivation of land. When the societies participate at on-farm production activities to improve their living standard, the probability of poverty will falling. The mean value of number of households income who were in the participant was birr 2971.732 and non-participant was birr 4447.665, the mean difference is 1475.924. Therefore, from the above table shows on-farm of household was statistically negatively insignificant.

### **Distance to the Market**

The distance to nearest market is very important infrastructural service. Beside the transport infrastructure, distance from the market. Therefore, from the above table 4.2 shows as the mean of participant was 4.01787 and non-participant of was 3.46875, the mean difference was -0.5491071. The result table show that the distance from market was statistically insignificant.

### **Non - Farm Income of the Household**

Non-farm income refers to the portion of farm household income obtained off the farm including non-farm wages and salaries, pensions, and interest income earned by farm families. Then, from the above table shows as the mean of participant was 1725.876 and the mean of non-participant was 1304.469, the mean difference -420.692. This variable affects the reducing poverty statistically insignificant.

### **Family Size of Household**

It was hypothesized that family size may have negatively relationship with the role of micro and small enterprise in reducing poverty. That means, as family size decrease, participation of enterprise also decreases that influence poverty reducing. Therefore, from the above table show as the mean of participant was 3.696429 and the mean of non-participant was 3.375, the mean difference -0.3214286.

### **Model Estimation of the Result**

This section describes the whole aspects of role of micro and small enterprise on poverty reducing. It explains the legit model and explains the effect of micro and small enterprise program across the participating household. This section presents the results of the logistic regression model which is used to estimate logistic regressions for program households with non-program households. As indicated earlier, the dependent variable in the model is binary variable indicating whether the household was a participant in the program. The model is estimated with STATA 12. In the estimation data from two groups; namely, participant and non-participant households were pooled such that the dependent variable takes a value 1 if the household was participant and 0 otherwise. The variables included in the model are assumed to affect not only a household participation in the program but also the outcome of the program.

**Table 2: Estimation Results of the Logit Model**

RMIS	Co ef.	Std. Err	z	P> z
SAHH	.0032989	.0014831	2.22**	0.026
AGHH	.2889119	.0848836	3.40***	0.001
EDUHH	3.305544	.826697	3.68***	0.000
ACXSER	2.003674	.826697	-2.42**	0.015
AMCRDTR	-1.740403	.7712734	-2.2688**	0.024
ONFHH	-.0000719	.0000675	-1.07	0.287
ACCTEC	1.262853	.7187164	1.76*	0.079*
DIMKT	.2748045	.193761	1.42	0.156
NONFHH	-.0001337	.193761	-0.96	0.337
FSHH	-.0001337	.2877648	0.95	0.343
CONS	-17.47777	4.909767	3.36	0.000
Number of obs		88	Pseudo R2	0.4910
Prob > chi2		0.0000	Log likelihood	-29.357777

Source: Own Survey 2020

\*\*\*, \*\* and \* means significant at the 1%, 5% and 10% probability levels, respectively

From the logit regression out of ten (10) independent (explanatory) variables six (6) of them were significant and others were insignificant.

The pseudo-R2 value 0.4910 is very weak because is under 75% of the strong. A weak value shows that the micro and small enterprise in poverty reducing was very low. In other words, a low R2 value means that program household characteristics overall and as such findings a good match between participant and non- participant households. The pseudo-R2 indicates how well the repressors explain the participation probability. The examination of the logit maximum estimates that 10 predictor variables were regressed and six variables were found statistically significant 1% (education of household, age of household), 5% (amount of saving ,access of extension ,access of credit) and 10%(access of technology). Moreover, to see the sign of some variables, amount saving, age household, education household, extension, access technology, distance from Market have positive sign are directly correlated with the probability of the participation. The negatively sign variables that are inversely correlated with the probability of participation are access of credit, on farm income, non-farm income and family size. The logit result (Table 4) indicated that six variables were statistically significance to determine the role of micro and small enterprise on poverty reducing.

### **Amount of Saving**

Saving includes putting money aside in for example, deposit account, pension account, an investment reducing expenditures, such as recurring cost. Saving is the portion of income not spent on current expenditure. Amount of saving of the households in the poverty reducing was statistically significant at 5% significant level.

### **Age of Household**

Age also shows significance relation with an income the relationship is positively indicating that the increase in the age of operators affects income of them. Younger people are more energetic, motivated and hence they might become successful in their business. Age of household of the household was statistically significant at 1%level of significance with positively related to the poverty reducing participation.

### **Education of Household**

Education of the household being poor decrease with increase in the educational attainment level of the household. It also organize non-informal education, arrange technical education, help for enrolling school children, run child development

programs, help for social development and poverty reducing. Education Household of the household was statistically significant at 1% level of significance with positively related to the poverty reducing participation.

**Access of Extension Service**

Extension service as a source of information on technology. The respondents who have frequent contact with extension workers are more likely to know the advantage of micro and small enterprise in reducing poverty. Therefore, access of extension service was statistically significant at 5% level of significance with positively related to the poverty reducing participation.

**Access of Credit**

Households with better access to credit have higher tendency to save more than that of households who do not access to credit service. Credit service was 5% negatively significant effect on micro and small enterprise in reducing poverty. The implication was that households who had more access to credit had higher probability to work. This possibly credit users would have more information and awareness regarding to credit than non-users

**Access of Technology**

Using different technologies that could enhance or increase profit of person in MSEs can have positive effect on their profit then reducing poverty. Therefore, access of technology was statistically significant at 10% level of significance; the result shows that as the Access of technology household increase there is a significant reducing poverty.

**Table 5: Opportunities and Constraints of MSEs in Reducing Poverty**

<b>Opportunities of MSEs in Reducing Poverty</b>	<b>Constraints of MSEs in Reducing Poverty</b>
MSEs play a significant role in offering and other basic amenities to individual who suffering from relative poverty	Skilled personnel
MSEs improvement of living standards specially women and youth	Production place
MSEs have great potential to achieve the desired development and to alleviate poverty.	Inadequate support from Government/non-governmental organization
MSEs the reduction of poverty through creating employment	Lack of vision and commitment from the side of the MSEs workers
	working capital
	Lack of credit facilities
	Lack of access for training
	Lack startup capital

**CONCLUSIONS**

The general objective the study is to examine the role of micro and small enterprise in poverty reducing in case of 01kebele. Poverty profile was computed with respect to these variables through descriptive statistics and Logit regression model was also employed to quantify the relationship between being poor and explanatory variables stated above. In the descriptive part analysis was made by making use of SPSS-16 version. Of the total sample respondents 32 were participant and 56 were non participant. These were 23.58% and 76.42% of the total sample, respectively. T-statistics and chi-square ( $\chi^2$ ) tests were used whether they are statistically significant or not using t-statistics and chi-square ( $\chi^2$ ) tests.

The study has use both primary and secondary data to find relevant information concerning about the topic. The primary data was conducts through qualitative and quantitative data gathering techniques to get the available source of

data. The qualitative data was collected through personal observation and interviewing while the quantitative data was collected through semi-structured, interview and questionnaires. The secondary source of data is published or unpublished material, website and other related documents. The model is estimated with STATA 12. A Logit model is used to estimate the data at hand. The advantage of this model is that the probabilities are bounded between 0 and 1. The dependent variable is dichotomous, taking two values, 1 if an individual participate in the poverty reducing and 0 otherwise.

Most people have limited opportunities, for an illustration, they have limited access to information and capital facilities. The growing involvement of micro and small scale enterprise in the country and in particular Finchawa town. The role of MSEs in employment creation and income generation for the poor, the Bule Hora Administered Office is advocating for the importance of these enterprises for enhancing development and growth by identifying youth and women as a target group for relevant support measure. In general Micro and Small enterprises play significant roles in the creations of employment opportunities and generations of income.

### **Recommendations**

Depending up on the findings of this study, the following recommendations are forwarded. The empirical result reveals that participation micro and small enterprise in poverty reducing has statistically significant and positive impact on household income generating per adult equivalent, Micro and small scale business enterprises are seen as the most important alternative sector in fostering socio-economic developments in both developed and developing countries. Particularly, they make undoubtedly a huge contribution to employment in many developing countries where there is a challenge of high unemployment and poverty exists

Therefore, any micro and small enterprise development interventions should include strategies on how to enhance the participation of the lower income households and strive to become indeed pro-poor.

- Access of credits for micro and small enterprise both at the start up levels and during operations is very important for achieving the objectives of enterprises in poverty reducing Hence, the government and nongovernmental bodies should support micro and small enterprise both at the start up levels and during their operations for easy accessing of credit facilities.
- Education significantly important for reducing poverty in the study area and In the study area, enabling environments like facilitating cooperation between enterprises with different development organizations and non-governmental organization, promoting entrepreneurial development programs, expanding training institutions, promoting market association building should be developed in order to increases the contributions of MSEs in poverty reducing.
- Access of extension services are the major institutions operating in the study areas. To obtain this advantage there is a need to improve extension system, and technical supervision and follow up must be strong. Strengthening micro and small enterprise linking respondent.
- Saving significantly important for reducing poverty, it was the portion of income not spent on current expenditure. Because person does not know what will happen in the future, money should be saved to pay for unexpected events or emergencies, without saving, unexpected events can become large financial burdens. Therefore, extension worker, government and financial institution motivate respondent to save.

## **Acknowledgements**

The authors wish to Journal of Agricultural Economics for providing a Research Article publication to the first author during 2020 to carry out this Article at BuleHora University, Oromia regional state, Southern Ethiopia. The critical review and comments offered by Dr. Zelalem Ayana and Dr. Teferi Daba were acknowledged. The assistance given from by Mr. Bayisa Bussa and Kumera Takele to collect the literature from different source is acknowledged .

## **Personal Profile**

Mr Haile Tamiru Urgessa was graduate by Masters of Science in Agricultural Economics from wollega University in 2016. And employed in BuleHora University as a lecturer and still serving as instructor and head department of Agricultural Economics

## **REFERENCES**

1. *Adeyemi, S.L. & Arem M. A (2011). Small and Medium Scale Enterprises as A Survival*
2. *Adil Yassin. (2007). Challenges and Constraints of Micro and Small Scale Enterprises in Addis Adjustment Financial Policy and Assistance Programs in Africa. In William F.Steel. Applying*
3. *AdmasuAbera. (2012). Factors Affecting the Performance of Micro and Small Enterprises in Administration, Culture and Information Bureau: Addis Ababa. Alleviating Urban Poverty in Nekemte City, Oromiya Regional State. MA thesis in Regional and Arada and Lideta Sub-Cities, Addis Ababa.MA thesis in Business Admistration, Addis Abab*
4. *Berhanu N. & Befkadu D. (2005).Transformation of the Ethiopian Agriculture: Potentials,*
5. *Botswana: the Role of Adult Education. University of Botswana: Gaboroni. Bulletin Number 282, Addis Ababa, Ethiopia. Bureau (Amharic).*
6. *Carpenter, C. (2003). "SME Finance in Nigeria". Paper presented to the Roundtable on "Making*
7. *Constraints and Suggested Interventives Measures. Report on the Ethiopian Economy, pp.103-139 (Volume IV) Ethiopian Economic Association.*
8. *CSA, (2007). The 2007 Population and Housing Census of Ethiopia: Statistical Report for Addis*
9. *CSA. (2000). Analyzed Report on the 1999 National Labor Force Survey. Statistical Bulletin,*
10. *CSA. (2018). Report on Urban Informal Sector sample Survey. AA: Ethiopia*
11. *CSA. (2012). Report on Urban Informal Sector Sample Survey.l*
12. *CSA. (2010/11). Urban Employment -Unemployment Survey study, Addis Ababa, Ethiopia*
13. *Daniel Woldekidan Elfeta. (2007). Micro and Small Scale Enterprises and their influences*
14. *Demis Alamirew. (2011). Role and Performance of Micro and Small Enterprises in Improving Development Studies. RLDS, Addis Ababa University.*
15. *Endalsasa Belay (2012). The Contribution of Group-Based Micro and Small Enterprises to the*
16. *Ephrem Setegn (2010). The Role of Micro and Small Enterprises in Poverty Alleviation*

17. *Ermias Werkilul (2011). A Study on Financial Sources of Micro and Small Enterprises in Addis Ethiopia: Association of Ethiopian Micro-Finance Institutions Occasional Paper No. 24. Addis Ethiopia: Emprical Evidence. Eastern Africa Social Science Research Review. Volume 22.*
18. *Forcheh, Nkemazem. (2003). Community Empowerment as a Strategy for Poverty Reduction*
19. *Gebrehiwot A. and Wolday Amha. (2006). Micro and Small Enterprises (MSEs) Finance in Geneva, Switzerland.*
20. *Getahun Reta. (2009). The Impact of Micro and Small Scale Enterprises Development Program Green, C. J., Murinde, V. & Kirkpatrick, C.H. (2006). Finance for Small Enterprise Growth and Gulele Sub City, Addis Ababa Ethiopia. MA Thesis in public Admistration, Addis Ababa*
21. *Haftu et al. (2009). Financial Needs of Micro and Small Enterprises (MSE) Operators in Helmsing A,H,J and Kolstee T. (1993). Small Scale Ente*
22. *Hussmanns, Ralf and Mehran, Farhad. (2005). Statistical Definition of the Informal sector.*
23. *ILO. (2000): Resolution concerning statistics of employment in the informal sector, adopted by international labor organization*
24. *ILO. (2002). Decent work and the informal economy: abstracts of working papers. Geneva,*
25. *ILO. (2003): Guidelines concerning a statistical definition of informal employment, endorsed by international labor organization*
26. *ILO. (2003a). Ethiopian Women Entrepreneurs: Going for Growth. ILO Sub-regional Office,*
27. *ILO. (2004). World Employment Report 2004-2005: Employment, Productivity and Poverty enterprises and changing Policies Structural*