

WERABE UNIVERSITY
COLLEGE OF AGRICULTURE AND NATURAL RESOURCE
DEPARTMENT OF AGRICULTURAL ECONOMICS

**FACTORS AFFECTING YOUTH PARTICIPATION IN MICRO AND
SMALL AGRICULTURAL ENTERPRISES IN DALOCHA WOREDA,
SILTE ZONE CENTRAL ETHIOPIA**

THESIS SUBMITTED TO THE DEPARTMENT OF AGRICULTURAL ECONOMICS, FOR
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DECLARATION

I KHALID HUSSEIN hereby declare that the thesis, entitled “FACTORS AFFECTING YOUTH PARTICIPATION IN MICRO AND SMALL AGRICULTURAL ENTERPRISES (A CASE STUDY OF DALOCHA WOREDA)” submitted to the Department of agricultural economics, College of agriculture and natural resource, Werabe University, in partial fulfillment of the requirements for the award of the Degree of MASTER OF AGRICULTURAL ECONOMICS (MAGEc), is a record of original research work done by me during 2015-2016(E.C), under the supervision and guidance of Dr. TEZERA W/MESKEL (PhD), and it has not formed the basis for the award of any Degree / Diploma / Associate ship / Fellowship or other similar title of any candidate of any university.

Place: Werabe

Date:25/04/2025

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CERTIFICATE

This is to certify that the thesis, entitled “FACTORS AFFECTING YOUTH PARTICIPATION IN MICRO AND SMALL AGRICULTURAL ENTERPRISES (A CASE STUDY OF DALOCHA WOREDA)” submitted to the Department of agricultural economics, College of agriculture and natural resource, Werabe University, in partial fulfillment of the requirements for the award of the Degree of MASTER OF AGRICULTURAL ECONOMICS is a record of original research work done by KHALID HUSSEIN during 2015-2016(E.C), under the supervision and guidance the thesis has not formed the basis for the award of any Degree / Diploma / Associate ship /Fellowship or other similar title of any candidate of any University and it complies with the regulation and accepted standards of the university.

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WERABE UNIVERSITY

COLLEGE OF AGRICULTURE AND NATURAL RESOURCE

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**FACTORS AFFECTING YOUTH PARTICIPATION IN MICRO AND SMALL
AGRICULTURAL ENTERPRISES (A CASE STUDY OF DALOCHA WOREDA)**

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DEDICATION

I dedicate this Thesis manuscript to my families and friends for tending me with affection and for their wholehearted partnership in the success of my life.

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ABBREVIATIONS AND ACRONYMS

AYA -	African Youth Agripreneurs
CSA -	Central Statistical Agency
EAFF-	East African Farmer Federation
EIA -	Ethiopian Investment Agency
FAO -	Food and Agricultural Organization
ILO -	International Labor Organization
MSEs -	Micro and Small Enterprises
MSAE -	Micro and small Agricultural Enterprises
MYSC -	Ministry of Youth, Sports & Culture
OYA-	Opportunities for Youth in Africa
PASIDP-	Participatory Small-Scale Irrigation Development Program
RYM-	Rural Youth Mobility
UN-	United Nations
UNCCD -	United Nations Convention to Combat Desertification
UNIDO -	United Nations Industrial Development Organization

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ABSTRACT

In Central Ethiopia, a rural job creation initiative is gaining momentum by actively involving young people in various agricultural activities through the establishment of groups and cooperatives particularly since 2015. Despite the vast employment opportunities in agriculture, young people often shy away from pursuing careers in the sub-sector. Hence this study was intended to identify factors affecting youth participation in micro and small agricultural enterprises in Silte zone of Central Ethiopia region. To attain this objective both primary and secondary data were employed. The primary data were generated from 73 non micro and small agricultural enterprises participant and from 131 micro and small agricultural enterprises participant youths, totally from 204 sample youths. In addition, data from focus group discussion was also generated using check list. The binary probit model was used to identify factors affecting youth participation in micro and small agricultural enterprises. The result of the study reveals that gender, age, education, annual income, land availability, awareness creation and training, initial saving, weak institutional capacity, lack of commitment, loan delay, and extension service contact were found to be significantly affecting youth participation in micro and small agricultural enterprises. The study suggested that strengthen the financial capability of youth by providing enough amount of credit without initial saving is a strategy to increases youth participation in micro and small agricultural enterprises. The government should create awareness or information about micro and small agricultural enterprises for the youths.

Keywords: Dalocha, Siltie, Micro and Small Agricultural Enterprises, Rural Youth, participation

1. INTRODUCTION

1.1. Background of the Study

The international development community increasingly views agriculture as a vital solution to youth unemployment, poverty, and food security challenges. However, youth participation in agriculture remains low, raising concerns about the sector's future sustainability (Özçatalbaş & Imran, 2020; Leavy & Hossain, 2014).

In Africa, where agriculture employs approximately 65% of the workforce, 90% of whom are youth, there is a pressing need to engage young people in this sector to harness its potential for economic development (Devèze, 2011; White, 2020).

In Ethiopia, agriculture is crucial, employing over 68% of the population (FAO, 2021). Despite this significant role, rapid labor force growth has made it increasingly difficult to create adequate job opportunities outside agriculture (CSA, 2020). The agricultural sector holds great promise for young entrepreneurs if supported by effective government policies (Boulanger, 2019).

Despite the potential benefits of engaging in agriculture, many Ethiopian youths, including graduates from other sectors, are reluctant to pursue careers in this field. Factors contributing to this hesitation include governance issues such as corruption and bureaucracy, a lack of social networks, skill mismatches with labor market demands, and deficiencies in educational policies (Mastewal, 2020; Moreda, 2020).

Historically, the Ethiopian government has provided limited support for micro and small enterprises (MSEs), which are essential for poverty reduction and job creation. Recent policies have begun to recognize the importance of MSEs in addressing unemployment (Fola & Tafesse, 2021; Batisa, 2019). The national youth policy emphasizes the significance of youth participation in governance and development processes.

The Ethiopian government has made considerable efforts to promote awareness among youth regarding the agricultural sector's potential. With job scarcity in established fields like the government and private sectors, agriculture presents an opportunity for self-employment (Tadesse et al., 2017). Initiatives encourage youth to organize into groups and access microfinance to start small businesses (Tadesse, 2020). However, despite these efforts, many youths remain hesitant to initiate their enterprises even after securing funding.

MSEs are critical drivers of economic growth and job creation in developed and developing nations. In Ethiopia alone, approximately 974,679 micro-enterprises support around 1.3 million people (CSA, 2020).

Youth entrepreneurs play a crucial role in economic development; their marginalization could hinder progress. A significant proportion of MSEs in Ethiopia remain survival-oriented and fail to expand or create jobs (Ahmed, 2021; Gebreyesus, 2019)

Moreover, in the Silte zone specifically, over 3,000 MSEs were established between 2005 and 2018 across various sectors like manufacturing and urban agriculture. However, many of these enterprises face operational challenges or remain stagnant (Maïga et al., 2015).while many MSEs have been registered, operational challenges persist. Detailed monitoring and evaluation are essential for developing effective policies that support MSE operators' success and sustainability (Woldehanna, 2015; Ahmed, 2020).

1.2. Statement of the Problem

Factors such as lack of good governance (nepotism, corruption, bias, and discrimination), limited social networks (mismatch between skills and the labor market) and low-quality education system contribute to youth graduates' unemployment. Agriculture is perceived as a risky and less profitable sector, which further discourages youth from participating in micro and small agricultural enterprises (Asmare & Mulatie, 2014). Different studies have been done on the participation of youth in agricultural enterprises in Ethiopia. Most of these studies emphasize the characterization of youth participation in agriculture with more focus on barriers and opportunity. Even though youth participation in agriculture has a lot of problems, the reasons behind them are not identified (Mastewal, Tewodros, Herman, Addisalem, & Selome, 2020; . T. Moreda, 2020).

There is a lack of evidence-based information in Ethiopia to help enabling policy improvement, specifically on youth participation in agricultural enterprise. Nevertheless, none of the formerly conducted studies considered the aspects that bound the youth participation likelihood in the agricultural enterprise as a job creation mechanism in Ethiopia and did not study the sector by paying attention to business size; like stating micro and small agricultural enterprises but whole business was concerned. They did not study factors affecting youth participation in micro and

small agricultural enterprises at micro and small business size, specifying the size of the business which makes the current research unique from others and it is research that is for the area regarding the issue concerned. Even though the Central Ethiopia Region used agricultural enterprises as the major rural job creation work for youth, limited attentions have been given to youth in relation to micro and small agricultural enterprises throughout district which was witnessed through assessed reports. Specifically, the reason behind why youths have low interest to participate in micro and small agricultural enterprises and even withdraw themselves after their engagement in micro and small agricultural enterprises are gaps in the study area. Based on the recent reports obtained from Silte Zone Job Opportunity and creation and Enterprise Development office the number of youth participant in agriculture sector showed a declined share among the job less rural youth registered. figuratively speaking, the share of youth participation declined from 40% to 25% for the last three consecutive years.

This study, therefore, aims to investigate the reasons why youth are not participating in micro and small agricultural enterprises and the challenges they face in the study area. The findings will contribute to identifying and addressing the barriers to youth engagement in micro and small agricultural enterprises, offering recommendations for improvements.

1.3. Research Questions

- i. How is the intensity of participation in micro and small enterprises among youth in the study area?
- ii. What is the level of youth participation in micro and small enterprises in the study area?
- iii. What are the factors that affect youth participation in micro and small enterprises in the study areas?

1.4. Research Objective

1.4.1. General Objectives

The general objective of the study was to identify the factors affecting youth participation in micro and small enterprises in Dalocha Woreda, Silte Zone, Central Ethiopia

1.4.2. Specific Objective

- i. Evaluate the intensity of participation in micro and small enterprises among youth in the study area.
- ii. Assess the level of youth participation in micro and small enterprises in the study area
- iii. Identify factors affecting youth participation in micro and small enterprises in the study areas.

1.5. Significance of the Study

This study was served as guidance for other researchers working on related topics. It was also helping to identify problems in the study area and provide interventions to enhance youth participation and their contribution to the agricultural industry.

The research paper aims to comprehensively analyze the factors affecting youth participation in micro and small agricultural enterprises in the study area. It seeks to identify these factors and determine the effectiveness of youth involvement in agricultural enterprises. The findings were offer recommendations to promote and support youth engagement in the sector, enabling policymakers, organizations, and individuals to design effective strategies and interventions to harness the potential of youth in agriculture.

1.6. Scope and Limitations of the Study

This study focused on factors that affect youth participation in micro and small agricultural enterprises and identifying the different micro and small agricultural enterprises available in the study area

The findings and conclusions reflect the statistical results of factors that affect youth participation in micro and small agricultural enterprises in the study area. The study includes both male and female youth participants. However, the researcher faced constraints such as financial issues and a lack of organized and recorded data in the districts, which impacted the study's depth. To overcome these problems the researcher will contact the Sponsors for financial issues contacting woreda administration office and zone Job opportunity creation and Industry Development Department for organized and recorded data.

1.7. Organization of the Study

This thesis research was organized into six chapters. Chapter one introduces the background of the study, the problem statement, the research questions, the research objectives, and the significance, scope, and limitations of the study. Chapter two provides a literature review, including conceptual explanations of youth, youth participation, and the definition of micro and small agricultural enterprises. It was also covering empirical studies on types of micro and small agricultural enterprises, factors affecting youth participation in micro and small agricultural enterprises, successful youth-led agricultural enterprises, challenges faced by youth-led agricultural enterprises, and key issues affecting youth in Ethiopia. Chapter three outlines the research methodology, including the study area description, sampling methods and sample size, data sources and collection methods, the definition of variables and working hypotheses, and data analysis methods. Chapter four presents Results and Discussions for the study. Finally, chapter five provides, conclusion, and recommendation for the study.

2. REVIEW OF RELATED LITERATURE

This chapter reviews and presents the literature on concept and definition of important terms; theoretical framework of all theories related with this study; Empirical findings by other researchers on determinants of rural youth participation in Micro and small agricultural enterprises, Analytical Framework methods of data analysis used by other researchers on similar issues and Conceptual Framework used for the study.

2.1. Concept and definitions of important terms

Youth: is best understood as a period of transition from the dependence of childhood to adulthood independence. That's why, as a category, youth is more fluid than other fixed age groups. Yet, age is the easiest way to define this group, particularly in education and employment, because 'youth' is often referred to as a person between the ages of leaving compulsory education and finding their first job. "Youth" are young people ages from 15 years to 24 years; (United Nations, UN), however, in practice there is no universal definition of youth. It varies from one country to another based on cultural, social, institutional, and political factors (UN, 1992). In Africa, there is no definite definition of youth, for instance, in Ethiopia a person aged between 15 and 29 years is a youth, in Uganda a person aged 12 to 30 years is said to be a youth, in South Africa a person between the age of 14 to 28 years is youth, (Ethiopia national youth policy, 2004). Rural Youth is a person who has reached the age of 15 but has not reached the age of 24 and resides in a rural area defined by the United Nations as 15–24 years old (Sourav,2018).

Rural youth account for around 55 percent of the world's youth population. They are among the most disadvantaged groups. Often, they have limited access to educational programs that are geared to their situation and needs - not surprisingly, many rural people drop out of school at an early age. Classwork is often geared more toward academic accomplishments and to the urban areas than to learning skills useful to rural life and preparing for adulthood. In many cases too, there is a genuine need for the young person's labor on the farm or in the home adding yet another reason why parents see little reason to keep their children in school. Rural young women have even greater difficulties than young men as they are often not given the same opportunities in education, training, and Involvement in rural development activities and overview with (FAO 2012). Therefore, in this study rural youth is the target of the research.

Youth participation: refers to the active involvement of young people in decision-making processes that affect them. It is a fundamental right recognized in various international declarations and conventions. By participating in their own development and community initiatives, young people gain important life skills, and knowledge of human rights and citizenship, and contribute to positive civic action. To enable effective youth participation, it is crucial to provide them with the necessary tools, such as information, education, and access to their civil rights. Given their innovative nature, youth should be at the forefront of agricultural development(FAO, 2012).

Agricultural enterprises: encompasses a wide range of industries involved in the production, processing, distribution, and marketing of agricultural products. It includes input suppliers, processors, traders, exporters, and retailers. The key focus of agribusiness is to connect farmers with consumers, facilitating the financing, handling, processing, storage, transportation, marketing, and distribution of agricultural products. Marketing plays a vital role in moving these products, especially those with short shelf lives, to different sectors and consumers.

Micro and small enterprises: The term MSE encompasses a wide range of definitions and metrics, which differ from country to country and from source to source. The definitions vary depending on the economic activity sectors. The number of employees, total net assets, sales and investment levels, annual turnover, annual balance sheet or production volume, and the company's independence are some of the most widely utilized criteria(H. Harjula, 2008). The number of employees and annual turnover appear to be the most essential criteria used to define MSEs(Eshetu & Ahmed, 2022),while(H. Harjula, 2008) argues that while the number of employees is the most often used criterion, the optimal criterion in each situation depends on the user's objective.

Alternative definitions for poor nations are provided by the United Nations Industrial Development Organization (UNIDO). Micro enterprises are defined as businesses with fewer than five employees, while small businesses have between five and nine employees ((UNIDO). 2002).

The 2011 MSE development strategy expanded on the previous definition by considering the number of employees and the current inflation rate after 13 years. At the time, most businesses

relied on family members to work for them, and there wasn't a lot of information about people in the sector, so the definition was based only on paid capital or capital investment(Organization & (UNIDO). 2002)

After gaining experience from the Federal Democratic Republic of Ethiopia(UNIDO, 2002) improved the definition by using the number of employees and total assets as criteria and dividing the sector into industry and services by considering the coming 5-year inflation and currency fluctuation/irregularity. A micro enterprise of industry operator is one that employs no more than 5 people, including the owner, and/or has a total asset of no more than Birr100,000, while a micro enterprise of service employs no more than 5 people, including the owner, and has a total asset of no more than Birr50,000. For industry operators, a small enterprise is one that employs 6 to 30 people and/or has a paid-up capital of total assets of Birr 100,000 and not more than Birr 1.5 million; for service providers, a small enterprise is one that employs 6 to 30 people and/or has a paid up capital of total assets of Birr 50,001 and not more than Birr 500,000 (Ethiopia, 2011).

2.2. Theoretical Framework of the study

2.2.1. Types of Agricultural enterprises in Ethiopia

Agriculture, including crop production, animal husbandry, forestry, fisheries, and apiculture, remains the most crucial sector in Ethiopia(Gashaw, Asresie, & Haylom, 2014).

(i) Livestock production

Ethiopia has the largest livestock population in Africa, with approximately 52.1 million cattle, 24.2 million sheep, 22.6 million goats, and 44.9 million poultry(Berihu, Aleme, & Mulata, 2014). Livestock holds immense value in Ethiopian society, serving various purposes from social to subsistence. It contributes significantly to the agricultural economy, accounting for 40% of its output(Duguma, Tegegne, & Hegde, 2012.)

(ii) Beef Cattle Production

Beef cattle production is a notable aspect, providing employment and income opportunities in both rural and urban areas (Taye & Lemma, 2009.).

(iii) Dairy Production

Dairy production is also prominent, with cattle being the primary source of milk production, followed by goats, camels, and sheep (C. S. A. CSA, 2010). Indigenous cattle breeds, despite their lower milk production, contribute to most of the country's milk output (C. S. A. o. E. CSA, 2017).

Dairy production plays a crucial role in income generation and employment for households, contributing to poverty alleviation and nutritional improvement (Ahmed, M., S.Ehui, & Y. Assefa, 2004.). The potential for dairy yield varies across different regions of Ethiopia, with average daily milk yields ranging from 13.3 liters to 81.4 liters per household, depending on farm size and location (Haile Welearegay, Yilma, & Yosef Tekle-Giorgis, 2012).

On the other hand, a study conducted in Haramaya District found that the average milk production per day by local cow breeds was 2.23 liters. Out of the participants, 2.4% owned three milking cows, 30.9% owned two milking cows, and 66.7% owned only one milking cow per household (Mitiku Eshetu, Seyoum, & Yesihak Yusuf Mammed, 2019.).

(iv) Poultry Production

Poultry production is deeply ingrained in Ethiopian society, with people from all occupations engaging in it. Traditional backyard poultry production accounts for over 90% of the national meat and egg output (Dana, Duguma, Teklewold, & Aliye, 2006). Village chickens play a significant role in rural households, providing cash income and nutrition (Habte, Ameha, & Demeke, 2013). Chicken production is becoming an attractive business in Ethiopia, especially with the introduction of new breeds. In Western Ethiopia, most chicken flocks consist of indigenous breeds such as Horro, Bako-Tibe, and Leka-Dulecha, with the remaining being commercial layers, broilers, and exotic dual-purpose chickens or hybrids (Demissu Hundie, Gebeyehu Goshu, Tamir, & Gemedo Duguma, 2019).

(v) Fruit and Vegetable Production

Ethiopia has a comparative advantage in horticultural commodities due to its favorable climate, proximity to European and Middle Eastern markets, and affordable labor. However, horticultural crop production is less developed compared to food grain production. The total production of vegetables and fruits by public and private commercial farms amounts to over 2.3 million tons,

which is less than 2% of the total crop production. The area under fruits and vegetables cultivation is also relatively small, accounting for only 0.11% of the total cultivated land in the country (Ethiopian Investment Agency, 2012).

(vi) Crop Production

Ethiopia's agricultural system is rain-fed, and the major grain crops grown in the country include teff, wheat, corn, barley, sorghum, and millet. Small-scale landholders are the primary producers of cereals, which are consumed as food or used as animal feed (Tefera, 2013.).

2.2.2. Youth participation in agriculture: Importance and challenges

Ethiopia recognizes the potential of its youth in contributing to socio-economic and political development. The National Youth Policy (2004) emphasizes the importance of youth participation in building a democratic system, good governance, and development. Efforts have been made to involve youth in decision-making processes, with youth federations being invited to participate in policy approval. The Ethiopian Youth Federation, established in 2009, consists of regional youth federations and aims to engage youth in local and national development.

However, some challenges hinder youth's active participation, including gender inequality, youth poverty, and limited recreational activities. Many youths have limited awareness of youth policies, and their involvement in decision-making processes and community livelihoods is limited. Volunteering programs and youth center services are also underutilized, particularly by young women. Youth federations face resource constraints in scaling up youth mobilization. It is important to provide necessary support and resources to youth federations at all levels and increase the number and quality of youth centers throughout the country to enhance youth participation in agriculture in Ethiopia, as highlighted in previous studies.

2.2.3. Successful youth-led agricultural enterprises in Ethiopia

There are several successful youth-led agricultural enterprises in Ethiopia, which have achieved success due to factors such as government support, access to land, and training and mentorship programs.

Poultry farming cooperative: Amiat Ahmed, a young woman from the South Wollo Zone of Amhara Region, joined a poultry farming cooperative supported by the FAO Rural Youth

Mobility (RYM) project. This initiative has helped her and other young people in the region earn income and provide for their families.

Participatory Small Scale Irrigation Development Program (PASIDP): This IFAD-supported program in the northern region of Tigray has provided young people with new opportunities, including pursuing their own farming businesses. Thanks to a government land-registration initiative, most communities within PASIDP's target areas have benefited, allowing young people and women-headed households to farm their own land.

African Youth Agripreneurs (AYA) platform: Supported by FAO and the East African Farmer Federation (EAFF), this platform responds to the youth demand for increased access to experience sharing, learning, and mentorship opportunities. It provides a space for rural youth Agripreneurs to share knowledge, engage in peer-to-peer learning, access agribusiness online courses, and receive mentorship and coaching relevant to their ventures.

Opportunities for Youth in Africa (OYA) program: Developed jointly by FAO, UNIDO, and AUC, the OYA program has successfully piloted and scaled up models for youth access to financing, training, and mentorship. It has supported numerous institutions and youth groups.

These examples demonstrate that with the right support and resources, young people in Ethiopia can successfully engage in agricultural enterprises. These initiatives not only provide income and employment opportunities for youth but also contribute to the overall development of the agricultural sector in the country.

2.2.4. Challenges faced by youth-led agricultural enterprises in Ethiopia.

Youth-led agricultural enterprises in Ethiopia face various challenges, categorized into economic, social, and environmental issues.

Economic challenges:

Limited access to capital: A young entrepreneur often struggles to secure the necessary funding to start or expand their businesses, particularly in the agricultural sector where initial investments can be substantial.

Poor infrastructure: The lack of reliable electricity and irrigation systems hampers the productivity and profitability of agricultural enterprises.

Market access: young farmers may face difficulty in accessing markets to sell their produce, especially in remote rural areas.

Social challenges:

Negative perceptions of agriculture: Many young people in Ethiopia view agriculture as a less desirable career path compared to "white-collar" jobs, discouraging them from pursuing opportunities in the sector.

Lack of quality education and training: Limited access to high-quality education and training opportunities hinders the development of skills needed to run successful agricultural enterprises.

Land inheritance issues: Rapid population growth and a higher proportion of youth contribute to landlessness among younger generations, posing a challenge for their engagement in agriculture.

Environmental challenges:

Climate change: Unpredictable weather patterns, including rainfall variability, pose challenges to agricultural productivity.

Poor harvests and storage facilities: Environmental factors and inadequate storage facilities lead to significant post-harvest losses (Zenebe & van Kooten G. Cornelis, 2020).

2.2.5. Key Issues Affecting Youth in Ethiopia

Policy and Legislation: In recent years, there has been increased focus on youth issues in Ethiopia, with the government implementing policies to support young people. The National Youth Policy of Ethiopia, established in 2004, aims to promote the rights and active participation of youth in various aspects of society. However, challenges remain in implementing the policy, including weak monitoring and evaluation tools, limited financial resources, and a lack of inter-sectorial cooperation.

Health: Despite progress in access to basic health facilities, Ethiopian youth still face health challenges. These include inadequate access to sexual and reproductive health services, malnutrition, high rates of HIV/AIDS, substance abuse, and gender inequalities. Young women are vulnerable to gender-based violence, early marriage, and harmful traditional practices.

Efforts are needed to address these issues and improve health education and prevention among youth.

Education: Ethiopia has made strides in improving youth education, with increased enrollment rates and literacy levels. However, there are still significant challenges, such as low education quality, high dropout rates, and disparities between urban and rural areas. Ethnic minority groups, rural youth, girls, and those from poor households face obstacles in accessing education. The government should work on changing societal perceptions of formal education and address the quality of education through better facilities, trained teachers, and adequate learning materials.

Employment: While there have been improvements in the labor market, youth in Ethiopia continue to face precarious conditions. Many earn below-average wages, work in the informal sector, or as unpaid family workers. Unemployment rates are higher for young women, and there is a divide between rural and urban areas, with different challenges in each. Access to high-quality education and formal sector employment is limited, and there is a demand for technical and vocational training programs that align with the needs of the labor market.

2.2.6. Micro & Small Enterprises Development in Ethiopia

The Micro & Small Enterprise Development Program in Ethiopia has been given due attention by the government since 2004/2005. Of course, in 1996/97 National Micro and Small Enterprise Strategy was developed by the government. However, the degree of recognition to the sector concerning job creation and the alleviation of abject poverty among impoverished youth & women was not sufficient (FMSEDA). and A.Ethiopia (2011)

Until 2004/2005, the national strategy was implemented by the Federal SMEs Development Agency organized only at a national level. Because of this, it was difficult to make the strategy practical, especially in delivering business development services for SME operators. Thus, by considering the critical role of the sector and the constraints faced by SME operators since 2004/2005 the government of Ethiopia decided to establish an SMEs coordinating body at the regional level (Ethiopia, 2011).

Accordingly, SMEs development Agencies are set up in all regions, even subbranch offices at zone/district level. The system helps to support a lot of SMEs and thereby create job opportunities for unemployed youth and women. Currently, the government has amended SMEs strategy with the objective of that in addition that the sector plays alleviating poverty & and reducing unemployment, to help the sector play its pivotal role as a base for medium and large-scale industries. The strategy is implemented all over the country. In amending the strategy, a lot of experiences were taken from different countries, especially from India, Japan, and Malaysia (Ethiopia, 2011).

2.3. Empirical Framework of the study

Different researchers carried out some empirical studies at different time on the factors that affects youth participation in micro and small agricultural enterprises reviewed as follows.

(Seid Mohamed & Destaw Muluye, 2022) examined Determinates of Rural and Per-Urban Youth Participation in Micro and Small Agricultural Enterprises in Gurage and Silte Zone. Accordingly, the study revealed that Land size, Total Income and Lack of initial saving positively affect youth participation in micro and small agricultural enterprises. Also Lack of commitment and Lack of information negatively affects youth participation in micro and small agricultural enterprises.

A study conducted in Gojjam, North Shewa, Kuyyu district, Begi district of west Wollega examined Factors Affecting Youth Participation in Agribusiness in Ethiopia (Moreda., 2020). Accordingly, several challenges that hinder youth engagement in micro and small agricultural enterprises are identified. These challenges include land shortage, lack of assets, such as money and skills, the outdated nature of agricultural tools positively affect youth participation in micro and small agricultural enterprises and attitudinal problems negatively affects youth participation in micro and small agricultural enterprises.

(Kassa Tarekegn , Kusse Kamaylo, Duge Galtsa, & Oyka, 2022) examined Youth Participation in Agricultural Enterprises as Rural Job Creation Work and Its Determinants in Southern Ethiopia. The study revealed that lack of working place and extension contact positively affect youth participation in Agricultural Enterprises as Rural Job Creation Work and credit getting

bureaucracy, education level, lack of initial capital, fear of being in a group are determinants of Youth Participation in Agricultural Enterprises as Rural Job Creation Work.

(Gitore Mulugeta Fola, Tsadiku Alemu, & Tafesse, 2021) examined Determinants of Rural and Peri-Urban Youth Participation in Small and Micro Agricultural Enterprises in Southern Ethiopia. The study identified several challenges that hinder youth engagement in agribusiness. These challenges include sex, educational level, Awareness of enterprises (Attitude) positively affect Rural and Peri-Urban Youth Participation in Small and Micro Agricultural Enterprises. Also, Institutional Arrangement and Distance of Credit Institutions negatively affects Rural and Peri-Urban Youth Participation in Small and Micro Agricultural Enterprises.

2.4. Analytical Framework of the Study

Different econometric models have been utilized to examine the factors influencing youth participation in micro and small agricultural enterprises across various studies. The binary models, particularly the logit and probit models, alongside multiple linear regression (MLR), have been employed in these analyses (Prosper *et al.*, 2015). To determine the most suitable econometric model for this study, a thorough evaluation of the dataset was conducted. Consequently, only binary models like logit and probit were deemed appropriate due to their capability to handle probabilities constrained between 0 and 1, effectively capturing nonlinear relationships.

Although both binary models share similar cumulative distribution functions—probit utilizing the normal distribution and logit employing the logistic function (J. Prosper *et al.*, 2015; Taddessemoredatura, 2017b) Gujarati (2004) highlighted a key distinction: the logistic function exhibits slightly heavier tails compared to the probit model's distribution. Furthermore, several studies have indicated that the probit model may be more advantageous because of its normal distribution characteristics regarding latent error terms (A. N.-A. Etim & E. J. Udoh, 2018; J. Prosper *et al.*, 2015; M. Joseph, 2021; N.-A. Etim, D. Thompson, & E. Udoh, 2020). Given that the data in question approximates a normal distribution, the probit model was selected over the alternative logit model to estimate the likelihood of youth involvement in agricultural enterprises.

According to the research studied by Seid and Destaw (2022) the econometric analysis conducted on a sample of 154 youths, including participants and non-participants in micro and small agricultural enterprises, utilized a logistic regression model to determine the factors influencing youth participation in such enterprises.

Similarly, Kassa *et al.*, (2023) in their study utilized a binary model, specifically the probit model, to analyze the determinants of youth participation in agricultural enterprises. The probit model was chosen due to its suitability for nonlinear relationships and the normal distributional nature of the latent error terms. By estimating the probit model, the study aimed to determine the probability of youth participation in agricultural enterprises based on the identified independent variables.

The authors used a binary model, specifically the probit model, to analyze the determinants of youth participation in agricultural enterprises. The dependent variable, youth participation, was measured using a dummy variable. In this equation, Y_i represents the youth participation in agricultural enterprises, and x_i is a vector of hypothesized independent variables. β represents the parameters to be estimated.

2.5. Conceptual Framework of the study

A conceptual framework gives details of the variables that are examined and their expected relationships of the study. It basically groups the variables into independent and dependent variables.

In this study, independent variables will be used to proximate the determinants that affect youth Participation in agricultural activities and will be used to depict the background characteristics of the respondents. The dependent variables will be youth participation in agriculture. Also, the intervening variables will be used in this study as illustrated in Figure 1.

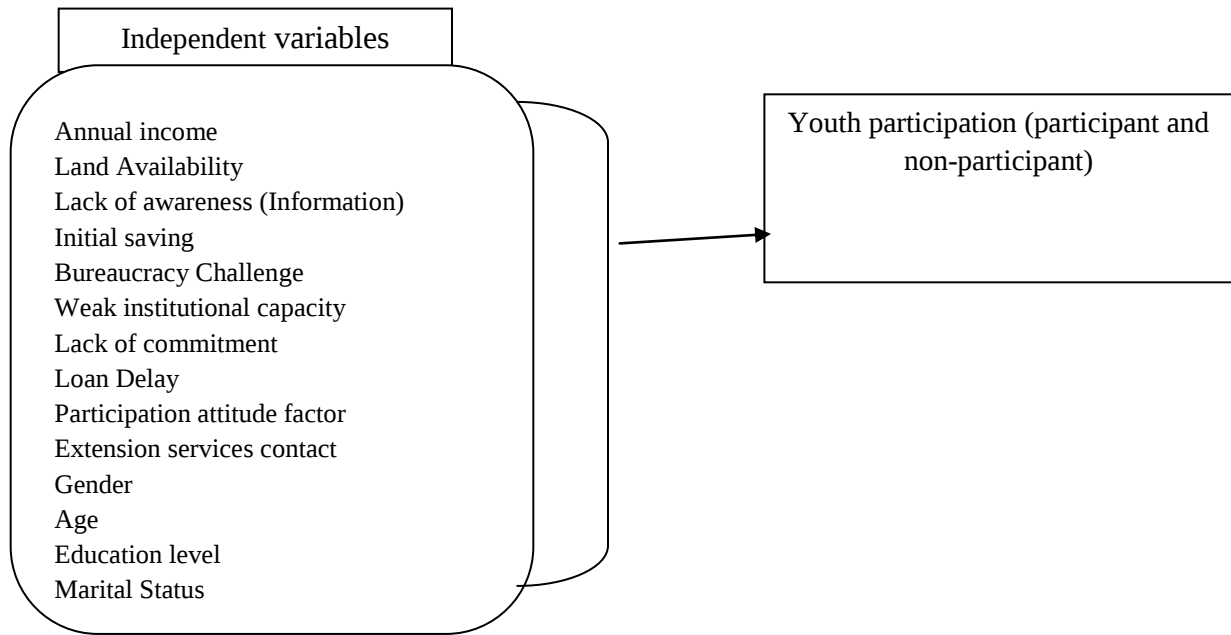


Figure 1 Conceptual Framework of the study
Source: from the result of literature review

3. RESEARCH METHODOLOGY

3.1. Descriptions of the Study Area

The study was conducted in the Siltie Zone of the Central Ethiopia Region, specifically in the Dalocha woreda. Siltie Zone consists of 10 woredas and 5 town administrations, including Dalocha, Silti, Misrak Silti, Lanfuro, Mito, Sankura, Me´erab Azernet Berbere, Misrak Azernet Berbere, Hulbarag, Worabe Town Administration, Tora Town Administration, Kibet Town Administration, Dalocha Town Administration, and Alemgebeya Town Administration. The central town of the zone, Worabe, is located 172 km from the capital city of Addis Ababa and 82 km from the central region capital city of Hossana. (Siltie Zone Plan Department, 2013 E.C)

The Siltie Zone has diverse agroecological conditions, ranging from hot arid, and semi-arid climates in the southern parts to highlands in the north and northwest. Most of the zone, about 79.5%, falls under the Weyna Dega type of agroecology, while 20.5% falls under the Dega climate condition. The varied agroclimatic conditions in the Siltie Zone allows production of different commercial and food crops.(Silte zone plan Department, 2021)

Dallocha woreda is one of the 10 rural woredas in the Siltie Zone. It is located 182 km away from Addis Ababa, 92 km from the central region capital city of Hossana and 12 km from the zonal capital city of Worabe. The woreda covers an area of 262.26 square kilometers and is bordered by Lanfuro woreda to the east, Silti woreda to the north, Hulbareg (Sankura) woreda to the south, and Worabe town administration to the west. Dalocha woreda has agroecological conditions falls under the Weyna Dega type of agroecology that allows production of different commercial and food crops. The geographical coordinates of Dallocha woreda range from - 7.793628 latitude and 38.242661 longitudes. (Silte zone plan Department, 2021)

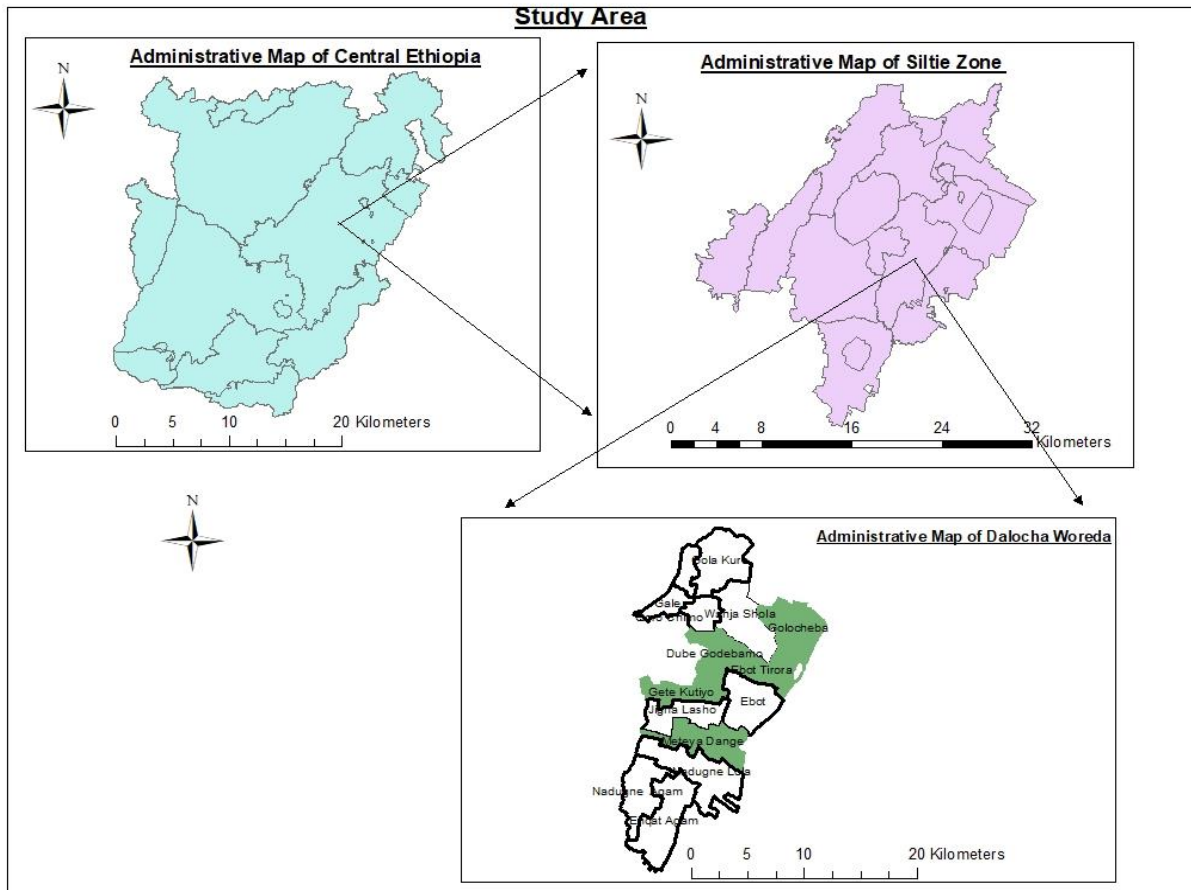


Figure 2 map of the study Area

Source: Silte zone plan Department (2021)

3.2. Research Design

The study was used both descriptive and explanatory designs to achieve its objectives. Descriptive statistics such as mean and percentages were used to analyze and quantitative data, while among econometric models, the probit model was used to analyze determinants of youth participation in agricultural enterprises. The design was also preferred because it saved time and money. Therefore, a case of central Ethiopia region, Dalocha district was used for a careful and complete analysis of the determinants of rural youth's participation in micro and small agricultural enterprises.

3.3. Sampling Method and Sample size determinations:

3.3.1. Sampling technique

A three-stage sampling procedure with probability proportional to size of the population was employed to draw districts, Kebeles and farm households. In the first stage, Dalocha Woreda was selected purposively for the study because it was one of the high numbers which means within 124 enterprises 615 youths are engaged in micro small enterprises and Dalocha Woreda was with the highest number of enterprises concentration. (Dalocha Woreda job opportunity creation and industry development office,2021)

In the second stage, from 15 rural kebeles 05 kebeles namely Gola Cheba, Hebot Tirora, Dube Godebamo, Gete Kutyo, and meteya dange were randomly selected from purposively selected woreda. Finally, a total of 204 sample households were randomly selected from the selected kebeles proportionate to the number of households in each kebele.

Stratification on youth participation and non-participation on micro and small agricultural enterprises.

Stratification should be done before data collection to ensure that your sample accurately reflects the diversity of the population and allows for meaningful analysis of different subgroups. By following these steps, effective Stratification of data and identification of participants on micro and small agricultural enterprises from non-participants on micro and small agricultural enterprises, enhancing the reliability and validity of research outcomes.

Table 1: Total number of households by Kebeles and their respective sample size

NO	Selected kebeles	Number participants	Number of non-participants	Total sample participants
1	Gola Cheba	30	6	36
2	Hebot Tirora	29	8	37
3	Dube Godebamo	23	19	42
4	Gete Kutyo	25	18	43
5	Meteya dange	24	22	46
	G/total			204

3.3.2. Sample size Determinations

To obtain a representative sample size for this study, the study will be employed the sample size determination formula given by Yamane (1967) provides a simplified formula to calculate sample sizes.

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

$$= 36118/1+36118(0.07)^2 = 204$$

Where, n=sample size, N=population size (sampling frame) and e=level of precision considered 7%.

3.4. Types, Sources and Methods of Data Collection

3.4.1. Types and source of data Collection

In this study, the required data were generated from both primary and secondary sources. Primary data were collected using a structured questionnaire that was administered by trained enumerators. For qualitative data collection, focus group discussions, and personal observations were employed. In addition to primary data, secondary data on youth lead agricultural enterprises profile and the total population of youth agricultural enterprises of Dalocha Woreda specifically at the kebele level were obtained from secondary sources such as monthly, quarterly, 6-month, and yearly report papers and job opportunity creation main department and Woreda offices.

3.4.2. Methods of Data Collection

The questionnaire is used as a main source of data-gathering instruments in this study because it helps the respondents to choose one or more options from scales that best align with their views. This study used questionnaires for representative youths of the enterprise. The questionnaire was prepared in English, then translated into Amharic language and distributed to sample household respondents with the help/collaboration of Woreda and Kebele expertise.

The focus group discussion was conducted through selected kebeles to acquire qualitative data from various groups of people such as representative youth family. FGD discussion is selecting from various categories according to sex and age. Each group consists of 7-8 members from

various groups of people especially house-headed youth families and kebele officials living in the sampled kebeles. 05 FGD were used. That means one focus group discussion per selected kebeles.

Among the primary data collection techniques, observation was crucial to understanding youth's activity based on how, what, and why youth are doing something. It is one of the most important sources of information in qualitative research. The researcher observed the physical condition of enterprises, package selection, financial records, land holding, loan repayment habit, assets generating, individual income level, and other program relation things in the natural setting, without bothering the interviewee by asking what can be will easily observed.

3.5. Method of Data Analysis

Both descriptive and econometric analysis methods were used. Descriptive statistics such as frequency, percentage, standard deviations, and means were used. The probit regression model was used to analyze factors that influence youth participation in micro and small agricultural enterprises and identify the available agricultural enterprises and the needs of youth. Ordered probit regression was used to evaluate the intensity of participation in micro and small enterprises among youth and to assess the level of youth participation in micro and small enterprises.

Model Specifications

Following Gujarati (2004), the probit model is specified as:

$$Y_i = \beta_i X_i + \mu_i \mu_i \sim N(0, 1) \dots \dots \dots \text{eqn (2)}$$

Where, Y_i is youth participation in agricultural enterprise that takes 1 if participating and 0 otherwise.

X_i = is a vector of hypothesized independent variables that affect youth participation decision.

β_i = is a parameter to be estimated that measures the effects of independent variables.

μ_i = is a normally distributed error term with a mean (0) and constant variance.

3.6. Definition of Variables and Working Hypotheses

Dependent Variable:

The dependent variable (youth participation) was measured by using a dummy variable that took up a value of 1 if the interviewed youths have participated in micro and small agricultural enterprise works, and 0 otherwise.

Definition of Independent variable

Sex of household head: - was a dummy variable which takes 1 value if the participant were male and 0 if the participant were female. According to (FAO, 2011.) women comprise about 43% of the agricultural labor force in developing countries but face significant gender-based barriers that restrict their participation and productivity. Thus, the more the youth women have participated in agricultural enterprises the more the enterprises face significant gender-based barriers that restrict their participation and productivity. Therefore, in this study sex of respondents were hypothesized to influence the participation of youth women in micro and small agricultural enterprises positively.

Age: - Was continuous variable and measured in years. The youngest age of the youth, the high participation in micro and small agricultural enterprises. According to (Davis, 2018) highlighted that young youth often encounter no barriers. Thus, the younger youth have participated in agricultural enterprises, the enterprises encounter no barriers. Therefore, in this study age of respondents will be hypothesized to influence the participation of youth in micro and small agricultural enterprises positively.

Education Level: This variable was measured using the number of years a person spent at formal schooling. According to (Seid Mohamed & Destaw Muluye, 2022), education increases the ability of youths to use their resources efficiently and the locative effect of education enhances youth's ability to obtain, analyze and interpret information and thus, a positive relationship with participation of youth in micro and small agricultural enterprises. Thus, the more the farmer has educated the more the participation of youth in agricultural enterprises. Therefore, in this study education level of respondents were hypothesized to influence the participation of youth in micro and small agricultural enterprises positively.

Marital status: - is a categorical variable refers to the legal and social status of an individual in relation to their marriage. It indicates whether a person is married, single, divorced, widowed. According to (Kadoukpè, 2023) marital status may have an impact on youth participation in agricultural enterprises. For example, married youth may have different responsibilities and commitments that could affect their ability to engage in agricultural activities compared to single youth. Additionally, marital status could influence access to resources such as land, labor, and credit, which are crucial for agricultural enterprises. Therefore, in this study marital status of respondents will be hypothesized to influence the participation of youth in micro and small agricultural enterprises negatively.

Annual income: - a continuous variable representing the overall financial resources available to a household. Higher household income levels can provide youth with alternative opportunities. According to (Seid Mohamed & Destaw Muluye, 2022) increase in total income strengthens the youth's financial capacity and allows them easily to cover the initial saving amount needed by finance institutions which in turn increases youth participation in micro and small agricultural enterprises. Therefore, in this study Annual income of respondents was hypothesized to influence the participation of youth in micro and small agricultural enterprises positively.

Land Availability: - A dummy variable refers to the amount of land that is accessible and suitable for agricultural activities. According to (Idowu James Fasakin 1 & Razack Adeoti 5, 2022; Mohamed & Muluye, 2022a) it is a crucial factor that influences youth participation in agricultural enterprises. Land availability determines the opportunities and constraints faced by young people in engaging in agricultural activities and establishing their farming enterprises. Therefore, in this study, respondents' land availability was hypothesized to positively influence youth participation in micro and small agricultural enterprises.

Awareness or information: A dummy variable refers to understanding or knowing about agricultural practices, market opportunities, and available resources. According to (G. M. Fola, T. Alemu, & H. Tafesse, 2021.) That is the probability of youth who have awareness about enterprise were to participation much higher than those who do not. Therefore, in this study, the Lack of awareness or information of respondents was hypothesized to influence the participation of youth in micro and small agricultural enterprises positively.

Initial saving: - Was a dummy variable refers to the amount of money or resources that a young individual had from personal saving, from family, from friends or relatives and from non-formal financial institution (Iqub/Idir) at the beginning of their involvement in agricultural enterprises. According to (Kadoukpè, 2023) It's known that most youths' lives with his family and have not his own income. Lack of own income disallows the youth to cover initial saving amount asked by finance institutions, there by this in turns decreases youth participation in MSAE. Therefore, in this study initial saving of respondents will be hypothesized those higher levels of initial savings among youth would positively influence their participation in micro and small agricultural enterprises.

Bureaucracy challenge: - Was a dummy variable refers to the obstacles and difficulties faced by individuals or organizations due to complex administrative procedures, regulations, and bureaucratic red tape in obtaining loan. According to (Kassa, 2023) it involves the excessive formalities, paperwork, and delays in decision-making processes that can hinder or discourage participation in various activities, including agricultural enterprises. Therefore, in this study the bureaucracy challenge in agricultural enterprises may have a positive impact on youth participation.

Weak institutional capacity: - Was a categorical variable refers to the limited ability of agricultural institutions to provide effective support, services, and resources to youth in the agricultural sector. According to (Mohamed & Muluye, 2022) Inadequate institutional capacity can hinder youth participation in Micro and small Agricultural Enterprises. Limited access to extension services, training programs, credit facilities, and market linkages can restrict their ability to engage in agricultural enterprises. Therefore, in this study Weak institutional capacity of respondents were hypothesized to influence the participation of youth in Micro and small Agricultural Enterprises positively.

Commitment by officials: - Was a dummy variable refers to a lack dedication, motivation, or interest in pursuing agricultural activities among youth. According to (Mohamed & Muluye, 2022a) As there is officials commitment that increase the youth moral and interest this in turns increases youth participation in MSAE. Therefore, in this study commitment by officials of respondents were hypothesized to influence the participation of youth in micro and small agricultural enterprises negatively.

Loan delay: - Was a continuous variable refers to the situation where there was a delay in the disbursement of funds or the approval process for a loan. It occurs when there was a delay in the lender's response or when the borrower experiences a delay in receiving the loan funds. According to (Kassa, 2023) Delayed loan disbursement or challenges in accessing financial support can hinder youth participation in micro and small agricultural enterprises. Lack of timely access to credit can limit their ability to invest in inputs, equipment, or expand their agricultural enterprises. Therefore, in this study Loan delay of respondents were hypothesized to influence the participation of youth in agricultural enterprises Negatively.

Participation attitude factor: - a categorical variable refers to the perceptions, aspirations, and motivations that influence a young person's willingness and decision to participate in small and micro agricultural enterprises. These participation attitude factors, along with other socioeconomic and demographic factors, such as land ownership, income, and access to credit, collectively determine the level of youth engagement in small and micro agricultural enterprises. According to (Mohamed & Muluye, 2022b) increasing access to land availability, access to income (market), access to credit increasing the participation of youth in micro and small agricultural enterprises. Therefore, in this study Participation attitude factor of respondents were hypothesized to influence the participation of youth in agricultural enterprises positively.

Extension services contact: - a continuous variable refers to the frequency and quality of interactions between farmers, particularly youth, and agricultural extension service providers. This variable is crucial for understanding how effectively extension services can disseminate knowledge, promote technology adoption, and ultimately enhance agricultural productivity and participation in micro and small agricultural enterprises. Youth engagement in micro and small agricultural enterprises is significantly influenced by their contact with extension services. According to (Loki O & Mdoda, 2023) youth who had regular interactions with extension agents were more likely to venture into micro and small-sized agricultural enterprises. These contacts provided them with essential information and support, which facilitated their participation in agriculture. Therefore, in this study extension services contact were hypothesized to influence the participation of youth in agricultural enterprises positively.

Table 1 definition of variable and expected sign

NO.	Variable description	Variable	Measurement	Expected sign
1	Youth participation in Micro and Small Agricultural Enterprises	Dummy	1 if respondents have participated in micro and small agricultural enterprise works, and 0 otherwise.	dependant t
2	Sex of household head	Dummy	1 = male, 0 = female	+
3	Age of respondent	Continuous	Number of years lived	+
4	Education Level	categorical	Formal years of schooling categorical value such as can't read and writing, Primary School, High school, Certificate, Diploma, Degree	+
5	Marital status	categorical	Marital status in categorical value such as 1=single 2=married 3=divorced 4=widowed	–
6	Annual income	Continuous	Total amount of income level	+
7	Land availability	Dummy	1 = yes, 0 = no	+
8	Awareness or information	Dummy	1 = yes, 0 = no	+
9	Initial saving	categorical	1 = yes, 0 = no	+
10	Bureaucracy challenge	Dummy	1 = yes, 0 = no	–
11	Weak Institutional capacity	categorical	5 = Strongly agree, 4 = Agree, 3 =Neutral, 2 = Disagree and 1= Strongly Disagree.	+
12	Lack of commitment by officials	Dummy	1 = yes, 0 = no	–
13	Loan delay	Continuous	Time (Months) taken to get loan	–
14	Participation attitude factor	categorical	5 = Strongly agree, 4 = Agree, 3 =Neutral, 2 = Disagree and 1= Strongly Disagree.	+
15	Extension services contact	Continuous	Number of extension service contacts received.	+

4. RESULTS AND DISCUSSIONS

The first specific objective of this research was to identify factors affecting youth participation in micro and small agricultural enterprises in Dalocha District. So, to attain this specific objective of the study, the researcher was used descriptive statistical tools along with inferential statistical mechanisms. The absolute number frequency and percentages of respondents have been used to describe the characteristics of the target population.

4.1. Descriptive Statistics Results

This section describes the demographic characteristics (sex of household head, age of respondent) and socio-economic characteristics (education Level, marital status, and annual income) of sampled respondents' youths, types of enterprises available in the study area, and factors affecting youth participation in micro and small agricultural enterprises.

4.1.1. Demographic and Socio-economic characteristics of sample respondents

Table 2 Summary Statistics for Continuous Variables

Variable	Participant				Non- participant				t-test result	sig
	Min	Max	Mean	Std.	Mi	max	mean	Std.		
Age	20	36	27.09924	3.122758	19	34	26.08219	3.939661	-2.0264	0.0440
Annual Income	10,000	249157	72441.21	37214.87	0	145000	54357.04	24459.87	-3.7255	0.0003
Loan delay	0	12	4.732824	3.427994	0	12	6.465753	4.425564	3.1112	0.0021
Extension services	0	48	28.47328	14.79622	0	36	13.45205	8.78294	-7.9256	0.0000

Source: own survey data, 2024

As indicated above in Table 3, the total sample size of the youth respondents handled during the survey was 204. Out of the total sample respondents, 131(64.22%) were micro and small agricultural enterprise participants and 73(35.78%) were non-non-participants. The average age of youth respondents for micro and small agricultural enterprise participants was 27 years old, while non-enterprise participants were 26 years old. The result of the t-test shows that there was

statistically significant mean difference between micro and small agricultural enterprise participants and non-participants in terms of age.

The average total income owned by micro and small agricultural enterprise participants was 72441.21 birr, while that of the non-enterprise participants was 54357.04 birr. The result of the t-test shows that there was statically significant mean difference between micro and small agricultural enterprise participants and non – participants in terms of annual income.

The average time of loan delay in micro and small agricultural enterprises participant were 5 months, while that of the non-enterprise participants were 6 months. The result of the t-test shows that there was statically significant mean difference between micro and small agricultural enterprise participants and non – participants in terms of loan delayed.

The average time of extension service contacts per year in micro and small agricultural enterprises participant were 28 times, while that of the non-enterprise participants were 13 times. The result of the t-test shows that there was statically significant mean difference between micro and small agricultural enterprise participants and non – participants in terms of extension service contact.

Table 3 Summary Statistics for dummy variables

Variables		Participant		Non -participant		Chi ² result	sig
		No	Percentage (%)	No	Percentage (%)		
Sex of household head	Female	37	28.24	37	50.7	10.2122	0.001
	Male	94	71.76	36	49.3		
Land availability	Yes	124	94.6	63	86.3	4.2839	0.038
	No	7	5.3	10	13.7		
Awareness creation and training	Yes	71	54.2	25	34.2	7.4903	0.006
	No	60	45.8	48	65.8		
	Iqub/Idir	35	26.7	3	4.1		
Bureaucracy challenge	Yes	120	91.6	67	95.7	0.0019	0.965
	No	11	8.4	6	4.3		
Lack of Commitment by officials	Yes	69	52.7	41	56.2	0.2301	0.631
	No	62	43.3	32	43.8		

Source: own survey data, 2024

As indicated in Table 3 above, out of the total sample respondents, 36.3% were female respondents and 63.7% were male respondents. Of the total sample respondents of micro and small agricultural enterprises participants, 28.24% were female and 71.76% were male. From the total sample respondent of non-participants in micro and small agricultural enterprises, 50.7% were female and 49.3% were male. The chi-square result shows that sex of respondents was a significant association with the enterprise participation's status.

From the total sample respondents of micro and small agricultural enterprises participants who owned land for agricultural practices were 124(94.7%) and those who did not own land were 7(5.3%) respondents. From the total sample respondents of non- participant in micro and small agricultural enterprises who owned land for agricultural practices were 63(86.3%) and those who

did not own land were 10(13.7%) respondents. The chi-square result shows that land availability was significant association with the enterprise participations' status.

From the total sample respondent of micro and small agricultural enterprises participant who did get awareness creation or training about agricultural practices were 71(54.2%) and who did not get awareness creation or training about agricultural practices were 60(45.8%) respondents. From the total sample respondent of non- participant in micro and small agricultural enterprises who did get awareness creation or training about agricultural practices were 25(34.2%) and who did not get awareness creation or training about agricultural practices were 48(65.8%) respondents. The chi-square result shows that awareness creation or training about agricultural practices had a significant association with the enterprise participation's status.

Table 4 Likert Scale criterion

NO	Vague Quantifier (Mean range)	Values
1	Strongly Agree	5.0 – 4.51
2	Agree	4.5 – 3.51
3	Neither Agree nor Disagree (Neutral)	3.5 – 2.51
4	Disagree	2.5 – 1.51
5	Strongly Disagree	1.5 – 1.00

Source: (J. R. Lindner & Lindner, 2024)

Table 5 Summary statistics for categorical variables

Variables		Participant		Non -participant		Chi ² result	sig
		No	Percentage (%)	No	Percentage (%)		
Education	can't read and writing	12	9.16	17	23.29	17.2257	0.306
	Primary School	87	66.41	38	52.05		
	High school	27	20.61	15	20.55		
	Certificate	4	3.05	11	1.37		
	Diploma	0	0.00	1	1.37		
	Degree	1	0.76	1	1.37		
Marital status	Single	69	52.7	40	54.8	0.0849	0.771
	Married	62	47.3	33	45.2		
	Widowed	0	0.0	0.0	0.0		
	Divorced	0	0.0	0.0	0.0		
	No	60	45.8	48	65.8		
Initial saving	Personal saving	6	4.6	1	1.4	19.1966	0.000
	Family	39	29.8	35	47.9		
	Friends/Relatives	51	38.9	34	46.6		
	Iqub/Idir	35	26.7	3	4.1		
Weak institutional capacity	Strongly disagree	55	42.0	26	35.6	83.5796	0.000
	Disagree	18	13.7	37	50.7		
	Neutral	16	12.2	6	8.2		
	Agree	11	8.4	4	5.5		
	Strongly agree	31	23.7	0	0		
Participation attitude factors	Strongly disagree	0	0.0	0.0	0.0	57.7301	0.000
	Disagree	1	0.8	0	0.0		
	Neutral	5	3.8	3	4.1		
	Agree	64	48.9	28	38.4		
	Strongly agree	61	46.6	42	57.534		

Source: own survey data, 2024

As indicated in Table 4 above, From the total sample respondents of micro and small agricultural enterprises participants education level were who can't read and writing 12(9.16%), Primary School 87(66.4%), High school 27(20.6%), Certificate 4(3%) and Degree 1(0.8%). From the total sample respondents of non- participant in micro and small agricultural enterprises education level were who can't read and writing 17(23.3%), Primary School 38(52%), High school 15(20.55%), Certificate 1(1.37%), Diploma 1(1.37% and Degree 1(1.37%). The chi-square result shows that education level was significant association with the enterprise participations' status.

From the total sample respondents in micro and small agricultural enterprises participant, 51 (38.9%) of respondents the major source of initial savings were friends/relatives, 39 (29.8 %) were family, 35 (26.7%) were nonformal financial institutions (Iqub/Idir) and 6 (4.6%) were personal saving. From the total sample respondent of non-participants of micro and small agricultural enterprises, 35(47.9%) of respondents the major source of initial saving was family, 34(46.6%) were friends/relatives, 3(4.1%) were microfinance institutions (Iqub/Idir) and 1(1.4%). The chi-square result shows that the major source of initial saving was a significant association with the enterprise participations' status.

From the total sample respondent in micro and small agricultural enterprises participant, 55 (42%) of respondent's response about institutional capacity related factor were strongly disagree, 31 (23.7 %) strongly agree, 18 (13.7%) were disagree, 16 (12.2%) were neutral and 11 (8.4%) were agree. From the total sample respondent of non-participant of micro and small agricultural enterprises 37 (50.7%) of respondent's response about institutional capacity related factor were disagree, 26 (35.6 %) were strongly disagree, 6 (8.2%) were neutral and 4 (5.5%) were agree. The chi-square result shows that weak institutional capacity was significant association with the enterprise participations' status.

From the total sample respondent in micro and small agricultural enterprises participant, 64 (48.9%) of respondent's response about participation attitude factor were agree, 61 (46.6%) were strongly agree, 5 (3.8%) were neutral and 1 (0.8%) were disagree. From the total sample respondent of non-participant of micro and small agricultural enterprises 42 (57.5%) of respondent's response about participation attitude factor were strongly agree, 28 (38.4 %) were agree and 3 (4.1%) were neutral. The chi-square result shows that participation attitude factor was significant association with the enterprise participations' status.

4.2. Econometric Model Results

This section describes the Econometric model results provide insights into the relationships between economic variables by employing statistical methods to analyze data.

4.2.1. Factors Affecting Youth Participation in Micro and Small Agricultural Enterprises

To determine the factors that influence micro and small agricultural enterprises a probit model was used. Multicollinearity tests were conducted for the model. The result shows that the VIF is less than 10, and the mean value of VIF is less than 2, which statistically confirms that there is no multicollinearity problem among the explanatory variables included in the model. A total of 14 variables (4 continuous, 6 dummy variables and 4 categorical) were selected and entered the probit model, out of which 11 variables significantly influenced youth participation in micro and small agricultural enterprises. As shown in the table, variables having a significant influence on the decision to participate in micro and small agricultural enterprises were Sex of household head, age, education, annual income, land availability, awareness creation and training, initial saving, weak institutional capacity, lack of commitment, loan delay, and Extension service.

Table 6. Factors affecting youth participation in micro and small agricultural enterprises: probit model results.

variable	Dy/dx	Std. Err	z	P> z	[95% C. I.]		x
Sex	.1859399	.08401	2.21	0.027*	.021274	.350605	.637255
Age	.085281	.01409	2.67	0.006**	.010914	.066143	26.7353
Educational level	.0221462	.01117	1.98	0.047*	.00025	.044043	5.7598
Marital status	-.1243401	.10127	-1.23	0.220	-.322821	.074141	1.46569
Annual income	4.00e-06	.00000	2.89	0.004**	1.3e-06	6.7e-06	65969.9
Land availability	.4180361	.18765	2.23	0.0026*	.050256	.785816	.916667
Awareness	.2233297	.07931	2.82	0.005**	.067892	.378767	.470588
Initial saving	.1580219	.05286	2.99	0.003**	.054413	.26163	2.7549
Bureaucracy challenge	.0427701	.16013	0.27	0.789	-.27107	.356611	.916667
Weak institutional	.0865206	.03237	2.67	0.008**	.023079	.149962	2.4902
Lack of Commitment	-.2063992	.07713	-2.68	0.007**	-.357571	-.055227	.539216
Loan delay	-.0261579	.01077	-2.43	0.015*	.047273	.005043	5.35294
Participation attitude	-.0655497	.10736	-0.61	0.541	-.275962	.144863	4.51471
Extension service contact	.019084	.00289	6.61	0.000***	.013422	.024746	23.098

***, **and* implies statistical significance at 1%,5%, and 10% level respectively.

Sex of household head: - It is one of the significant factors that affect youth's participation in micro and small agricultural enterprises. Gender was positively and statistically affecting youth participation in micro and small agricultural enterprises at 10% level of significance. This indicates that on average, being male increase the probability of youth participation in micro and small agricultural enterprises by 18.59% than their female counterpart, holding all other factors constant. This argument was also in line with the previous studies(Nkhata & Mbewe, 2019) which stated that female youth face more barriers to participation compared to their male counterparts, which affects overall engagement levels.

Age was positively and statistically affecting youth participation in micro and small agricultural enterprises at 5% level of significance. This indicates that as the age of the youth increase by a year, the probability of youth participation in micro and small agricultural enterprises increase by 8.52% held all other factors constant. This was because of older youth are more likely to engage in agricultural activities due to increased experience and responsibilities this was in line with the findings of (Etim & Udo, 2020).

Educational level was positively and statistically affecting youth participation in micro and small agricultural enterprises at 10% level of significance. As education level increase by 1 grade, the probability of youth participation in micro and small agricultural enterprises increase by 2.2% held all other factors constant. This finding was similar with (M. Gitore, 2021) which indicated that the likelihood of youth participation in micro and small agricultural enterprises increased as the education level increased.

Annual income was one of the factors that influence youth participation in micro and small agricultural enterprises positively and significantly at 5% level of significance. As income of the youth increases by a birr, the probability of youth participation in micro and small agricultural enterprises increase by 400% held all other factors constant. This suggests increase in annual income strengthens the youth's financial capacity that allows them easily to cover the initial saving amount needed by financial institution (omo micro finance) that in turn increases youth participation in micro and small agricultural enterprises. During focus group discussion (FGD) the youth stated that the most challenging things to participate in micro and small agricultural enterprise was initial saving. So, the youth who have income have the high probability to participate in micro and small agricultural enterprises. This finding was similar with (Khan &

Kausar, 2020) which indicated that higher income levels significantly enhance the likelihood of youth participating in agricultural enterprises, as they can more easily cover initial costs.

Land availability was positively and statistically affecting youth participation in micro and small agricultural enterprises at 10% level of significance. This indicates that as the land owned by youth increase by a hectare, the probability of youth participation in micro and small agricultural enterprises increase by 41.8% held all other factors constant. It is obvious that youth who has more land has high probability to have his own income that allows him to cover the initial saving amount needed to participate in micro and small agricultural enterprises.

During focus group discussion participants emphasized that Land access emerged as a significant barrier. Participants called for strengthened systems to ensure that land or workspace allocated by the government is efficiently transferred to new youth enterprises in line with contractual agreements. The use of family land was also discussed, with some participants indicating the need for support to overcome legal or customary restrictions that limit their ability to use family-owned land for agricultural activities.

Awareness creation and training of the youth had positively and significantly affected youth participation in micro and small agricultural enterprises at 5% level of significance. It indicates that as the youth had awareness creation and training, it increased youth participation in micro and small agricultural enterprises by 22.33% keeping all other variables constant. The reason behind this is obvious the youth who have awareness about micro and small agricultural enterprises and their establishment had chance to participate, there by increases youth participation in micro and small agricultural enterprises. That is the probability of youth who have awareness about enterprise were willing to participate is much higher than those who were not. This finding was also in line with the previous study (Khan & Kausar, 2020) highlights that training programs significantly increase youth engagement in agricultural enterprises by providing essential skills and knowledge.

During focus group discussion participants emphasized that the need for ongoing training and capacity building was strongly emphasized. Youth expressed interest in programs covering modern agricultural techniques, business management, marketing, and technology adoption. Collaborations with non-governmental organizations and educational institutions were seen as valuable for delivering relevant training and mentorship opportunities. Participants also

highlighted the benefits of participating in agricultural fairs and networking events to enhance skills and build connections.

Initial saving was the variable that positively and significantly affects youth participation in micro and small agricultural enterprise at 5 % level of significance. This indicates that lack of initial saving decreases participation in micro and small agricultural enterprises by 15.8% keeping all other variables constant. It's known that most youths' lives with his family and have not his own income. Lack of own income disallows the youth to cover initial saving amount asked by financial institution (omo micro finance), there by this in turns decreases youth participation in micro and small agricultural enterprises. This was consistent with the result reported by (Kassa Tarekegn et al., 2022) identifies lack of initial capital as a significant barrier to youth participation in micro and small agricultural enterprises agricultural enterprises, emphasizing that initial savings are crucial for engagement in micro and small agricultural enterprises.

During the focus group discussion Participants emphasized the importance of developing a savings culture among youth as a critical first step to engaging in micro and small agricultural enterprises. Many noted the need for extensive mobilization activities to help youth gain experience in saving money. Those who struggled to save suggested involvement in temporary income-generating activities such as sand, stone, and borehole production to accumulate initial capital. Financial literacy training was also highlighted as essential to help youth manage their savings effectively.

Weak institutional capacity according to the econometric result, is one of significant factors that affect youth's participation in micro and small agricultural enterprises. Weak institutional capacity was positively and statistically affecting youth participation in micro and small agricultural enterprises at 5% level of significance. This indicates that for the youth weak institutional capacity, the probability of the youth to participate in micro and small agricultural enterprises decrease by 8.56% held all other factors constant. The support of government in credit access and market linkage is weak there by this in turns decreases youth participation in micro and small agricultural enterprises. This finding was also in line with the previous study (Kassie, 2018) highlights how insufficient support and commitment from government officials can significantly hinder youth engagement in agricultural enterprises.

During the focus group discussion Participants emphasized that improving market access was a major concern among participants. They suggested the development of marketing systems that enable youth to enter into pre-contracts with local institutions such as universities and hotels to secure stable markets for their products. Additionally, participants recommended support to diversify market options. The implementation of value chain approaches was viewed as a way to enhance product quality and profitability.

According to the econometric result, **lack of commitment by officials** was found negatively and significantly influence youth participation in micro and small agricultural enterprises and statistically significant at 5% level of significance. This indicates that as the officials lack commitment, the probability of youth participation in micro and small agricultural enterprises decreases by 20.63% all other factors held constant. As the officials lack commitment that kills the youth moral and interest this in turns decreases youth participation in micro and small agricultural enterprises. This was consistent with the result reported by (Kassie, 2018) discusses how the commitment level of officials negatively influences youth motivation and participation in entrepreneurial activities, including agriculture.

Many participants reported that bureaucratic hurdles, including complex registration and licensing procedures, discourage youth from formalizing their enterprises. They recommended strengthening monitoring and support systems to help youth navigate these processes more easily. The establishment of dedicated youth support centers or “one-stop shops” was suggested to reduce administrative burdens.

Loan delay was negatively and statistically affecting youth participation in micro and small agricultural enterprises at 10% level of significance. This indicates that as the time of a delay in the disbursement of funds or the approval process for a loan for youth increase by a month, the probability of youth participation in micro and small agricultural enterprises decrease by 2.61% held all other factors constant. The result was agreed with the findings of (Kassa Tarekegn et al., 2022) discusses how bureaucratic delays in loan disbursement negatively affect youth participation in agricultural enterprises, indicating that longer approval times lead to decreased engagement.

During focus group discussion the participants expressed a strong desire for increased government support through the allocation of adequate budgets specifically for youth loans

aimed at agricultural ventures. They reported challenges in accessing affordable credit and recommended that loan schemes be tailored to the unique needs of young entrepreneurs, with simplified application processes. The availability of low-interest loans and grants was seen as a motivating factor to encourage greater youth participation in micro and small agricultural enterprises .

Extension service contact was positively and statistically affecting youth participation in micro and small agricultural enterprises at 1% level of significance. This implies that as the extension contact increase by one unit, the probability of youth participation in micro and small agricultural enterprises increase by 1.9% held all other factors constant. This finding was similar with (Kassa, 2023), it implies that as extension contact increases, the probability of youth engagement in micro and small agricultural enterprises will increase by 11%.

4.2.2. Ordered Probit Regression Result for Level of Participation.

Research using ordered probit regression has identified a range of socio-economic, institutional, and resource-related factors that significantly influence the level of youth participation in micro and small agricultural enterprises. These factors not only determine whether youth participate but also the degree or level of their engagement, which is often measured as an ordinal outcome (e.g., low participation and high participation).

Table 7. Ordered probit regression result for level of participation.

level	Coef.	Std. Err	z	P> z	[95% Conf. Interval]	
Sex	-.0186462	.2266935	-0.08	0.934	-.4629572	.4256649
Age	.0056301	.0390978	0.14	0.885	-.0710001	.0822604
Education	.0725205	.0293513	2.47	0.013*	.014993	.1300481
Marital status	.2730114	.2765629	0.99	0.324	-.269042	.8150647
Annual income	1.58e-06	3.68e-06	0.43	0.668	-563e-06	8.79e-06
Land availability	.2815251	.448552	0.63	0.530	-.5976207	1.160671
Awareness creating	-.0091798	.2429161	-0.04	0.970	-.4852867	.4669271
Initial saving	-.0503717	.1418579	-0.36	0.723	-.3284081	.2276647
Bureaucracy challenge	.9208331	.4783156	1.93	0.054	-.0166482	1.858314
Weak institutional capacity	-.177583	.0867147	-2.05	0.041*	-.3475407	-.0076254
Lack of Commitment	-1.005396	.2214339	-4.54	0.000***	-1.439398	-.5713934
Loan delay	-.1291482	.0323325	-3.99	0.000***	-.1925187	-.0657777
Participation attitude	-.7762498	.2751183	-2.82	0.005**	-1.315472	-.2370279
Extension service contact	.0017603	.0076166	0.23	0.817	-.013168	.0166885
/cut1	-2.637419	1.589359			-5.752504	.477667

Educational level: - As the year of education level increasing, the likelihood of high level of participation is 7.2%. This is due to the fact that as youth participation years of schooling increase makes the youth more aware of the relevance of participating in the sector. This result consistent with the findings of Moreda ,2020.

Weak institutional capacity: -Weak institutional capacity makes the level of youth participation low in relative to the institution capacity is otherwise. The weak institutional capacity definitely

reduces the level of youth participation's result was consistent with the findings of Kassa, et al,2022.

lack of commitment by officials: - As lack of commitment from government sector makes the likelihood of low level of participation by 10% low compared when the commitment is otherwise. The theoretical justification for the tendency of low participation is because the less commitment the the lower level of youth participation. This result is consistent with the findings of Michael 2017.

Loan delay: - As the loan delay increase by a month the likelihood of level of youth participation is relatively low with 12.9%. The loan delay makes youth relatively discourage their interest of participating in enterprise. This result consistent with the findings of Seid and Destaw,2022.

Participation attitude factors: - Youth with less attitude participation has 7.7% low participation compared with youth with better attitude. This result consistent with the findings of Adella et al,2022.

4.2.3. Ordered Probit Regression Result for Intensity of Participation.

The Ordered Probit Model quantifies how various factors influence the probability of youth exhibiting different levels of participation intensity in micro and small enterprises. The model outputs coefficients and marginal effects, which are interpreted to inform policy and program design (e.g., low participation and high participation).

Table 8 Ordered probit regression results for intensity of participation

intensity	Coef.	Std. Err	z	P> z	[95% Conf. Interval]	
Sex	-.0186462	.2266935	-0.08	0.934	-.4629572	.4256649
Age	.0056301	.0390978	0.14	0.885	-.0710001	.0822604
Education	.0725205	.0293513	2.47	0.013*	.014993	.1300481
Marital status	.2730114	.2765629	0.99	0.324	-.269042	.8150647
Annual income	1.58e-06	3.68e-06	0.43	0.668	-563e-06	8.79e-06

Land availability	.2815251	.448552	0.63	0.530	-.5976207	1.160671
Awareness creating	-.0091798	.2429161	-0.04	0.970	-.4852867	.4669271
Initial saving	-.0503717	.1418579	-0.36	0.723	-.3284081	.2276647
Bureaucracy challenge	.9208331	.4783156	1.93	0.054	-.0166482	1.858314
Weak institutional capacity	-.177583	.0867147	-2.05	0.041*	-.3475407	-.0076254
Lack of Commitment	-1.005396	.2214339	-4.54	0.000** *	-1.439398	-.5713934
Loan delay	-.1291482	.0323325	-3.99	0.000** *	-.1925187	-.0657777
Participation attitude	-.7762498	.2751183	-2.82	0.005**	-1.315472	-2370279
Extension service contact	.0017603	.0076166	0.23	0.817	-.013168	.0166885
/cut1	-2.637419	1.589359			-5.752504	.477667

Educational level: - As the year of education level increasing, the likelihood of high level of participation is 7.2%. This is since as youth participation years of schooling increase makes the youth increases the probability of being in a higher participation intensity category. This result consistent with the findings of Moreda ,2020.

Weak institutional capacity: -Weak institutional capacity makes the level of youth participation low in relative to the institution capacity is otherwise. The weak institutional capacity increases the probability of being in a lower participation intensity category, result was consistent with the findings of Kassa, et al,2022.

lack of commitment by officials: - As lack of commitment from government sector makes the likelihood of low level of participation by 10% low compared when the commitment is otherwise. The theoretical justification for the tendency of low participation is because the less

commitment a lower participation intensity category. This result is consistent with the findings of Michael 2017.

Loan delay: - As the loan delay increase by a month the likelihood of intensity of youth participation is relatively low with 12.9%. The loan delay makes youth relatively discourage their interest of participating in enterprise. This result consistent with the findings of Seid and Destaw,2022.

Participation attitude factors: - Youth with less attitude participation has 7.7% lower participation intensity category compared with youth with better attitude. This result consistent with the findings of Adella et al,2022.

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter of the narrative is the fifth of the thesis. It provides a brief account and a summary of the objectives, methods, and major findings. This chapter presents substantial discoveries, draws conclusions, and gives recommendations on such issues and other relevant concerns.

5.1. Summary

The study looked at the types of agricultural enterprises available in the area, as well as the factors that influence whether young people choose to participate in these enterprises.

When it comes to the types of enterprises, the researchers found that the youth are mainly engaged in things like crop production, livestock fattening (cattle, sheep, goats), poultry, dairy farming, small-scale irrigation, and beekeeping. The most popular enterprises chosen by the young people were crop production, cattle fattening, poultry, and sheep/goat fattening.

As for the factors influencing participation, the study looked at a range of things - from personal characteristics like gender and age, to economic factors like income and access to land, to institutional support like training programs and extension services.

The key findings were:

Gender matters - being male increased the chances of participating by almost 19%. Older youth were also more likely to get involved, with a 1-year increase in age boosting the probability by over 8%.

Education pays off - each additional year of schooling increased the chances of participation by 2.2%. And having a higher annual income, which strengthens financial capacity, made youth 4 times more likely to take part.

Access to land was crucial - having available land increased the probability of participation by over 40%. Similarly, receiving awareness training and having initial savings also significantly boosted involvement.

However, certain institutional factors held youth back. Weak support from government agencies, a lack of commitment from officials, and delays in accessing loans all reduced the chances of participation.

The study highlights that a combination of personal, economic, and institutional factors shape whether youths in this study area engage in micro and small agricultural enterprises. Addressing the barriers they face, while building on the enablers, will be key to encouraging more youth to get involved in this vital sector.

5.2. Conclusion

Micro and small agricultural enterprises at the study area participated so many youths in which youth are playing their own shares in the Micro and small agricultural enterprises. From total sample size of respondents handled during the survey, it was found that 131(64.22%) of youth are participating in micro and small agricultural enterprises in the study area from which 36.3% were female whereas 63.7% were male from participants. They are engaging mainly in Crop Production, fattening of oxen, poultry production, Sheep and Goat Fattening, dairy farm, small scale irrigation, Livestock production and Bee keeping. Even though youth are engaging in micro and small agricultural enterprises, it is not to mean some problems are not challenging them while working in the agricultural enterprises.

The result of probit regression analysis shows that youth participation in micro and small agricultural enterprises is significantly affected by Sex of household head, age, educational level, annual income, land availability, awareness creation and training, initial saving, weak institutional capacity, lack of commitment, loan delay, and extension service contact. The study indicated that Sex of household head indeed influences on youth involvement in micro and small agricultural enterprises. It was found in positively affecting youth participation in micro and small agricultural enterprises which was found significant at 10% significance level. That means being male increase the probability of the youth participation in micro and small agricultural enterprises, which is an implication of that female youth face more barriers to participation compared to their male counterparts, which affects overall engagement levels. Age was also found in positively and statistically affecting youth participation in micro and small agricultural enterprises at 5% level of significance. This indicates that as the age of the youth increase by a year, the probability of the youth to participate in micro and small agricultural enterprises increases. Educational level was one of the factors that influence youth participation in micro and small agricultural enterprises positively and significantly at 10% level of significance. This indicates that as education level increase by 1 grade the probability of youth participation in

micro and small agricultural enterprises increases. Annual income was also one of the factors that influence youth participation in micro and small agricultural enterprises positively and significantly at 5% level of significance. As income of the youth increases by a birr, the probability of the youth to participate in micro and small agricultural enterprises increases and This suggests increase in annual income strengthens the youth's financial capacity that allows them easily to cover the initial saving amount needed by financial institution (omo micro finance) that in turn increases youth participation in micro and small agricultural enterprises. Land availability was also found in positively affecting youth participation in micro and small agricultural enterprises from output of probit regression at 10% significance level. That means as land is made available for youth, their participation in micro and small agribusiness increases. Awareness creation and training of the youth was also found in positively and significantly affected youth participation in micro and small agricultural enterprises at a 5% level of significance. It indicates that as the youth had awareness creation and training, it increased youth participation in micro and small agricultural enterprises. Agricultural enterprises just like any other enterprises entity requires capital for start-up working and hence initial saving is crucial for youths who want to join agricultural enterprises. Initial saving was also found in positively and statistically significant at 5% level of significance in enhancing in micro and small agricultural enterprises. It is an implication of that lack of initial saving decreases participation in micro and small agricultural enterprises. Lack of own income disallows the youth to cover initial saving amount asked by financial institution (omo micro finance), there by this in turns decreases youth participation in micro and small agricultural enterprises. Weak institutional capacity according to the econometric result, was also found in positively and statistically affecting youth participation in micro and small agricultural enterprises at 5% level of significance. That means for the youth weak institutional capacity, the probability of the youth to participate in micro and small agricultural enterprises decreases. The support of government in credit access and market linkage is weak there by this in turns decreases youth participation in micro and small agricultural enterprises. Lack of commitment by officials was also found in negatively and significantly influence the youth to participate in micro and small agricultural enterprises and statistically significant at 5% level of significance. That means as the officials lack commitment that kills the youth moral and interest this in turns decreases youth participation in micro and small agricultural enterprises. Loan delay was also found in negatively and statistically affecting youth

participation in micro and small agricultural enterprises at 10% level of significance. That means as the time of a delay in the disbursement of funds or the approval process for a loan for youth increase, the probability of the youth to participate in micro and small agricultural enterprises decreases. Extension service contact was also found in positively and statistically affecting youth participation in micro and small agricultural enterprises at 1% level of significance. That means as the extension contact increase by one unit, the probability of the youth to participate in micro and small agricultural enterprises increases.

Ordered probit regression studies consistently show that youth participation in micro and small agricultural enterprises is shaped by a complex interplay of educational level, Weak institutional capacity, lack of commitment by officials, Loan delay and Participation attitude factors. Addressing these determinants through targeted interventions can significantly enhance both the likelihood and the level of youth engagement in the agricultural sector.

Therefore, all these findings call for an intervention regarding the issues under consideration by strengthening positive findings and by encountering (tackling) negative findings. For overall, these variables should be targeted for improvement to further increase participation of youth in the business.

5.3. Recommendation

Based on result of the study the following points were recommended to improve youth participation in micro and small agricultural enterprises:

Land is the single most important natural resource in the sense that it affects every aspect of a youths live. This variable was found significant in positively affecting youth participation in micro and small agricultural enterprises. As it is concerned, government must take control over land use; government and non-governmental sector must give more attention again in soil management work via funding them. As some respondents replied to scarcity of land, so led to problem in producing land intensive agricultural production, local government has to more intensify micro and small agricultural enterprises practices that can give more products per small plot of land, like cattle fattening and dairy production behind others via improving access to extension contact and improving access to input.

Creating awareness or information for the youth about micro and small agricultural enterprises (MSAE) is a vital to push them to participate in micro and small agricultural enterprises (MSAE). The creation of awareness or information was limited for most youth. The study recommends government should provide information or create awareness about micro and small agricultural enterprises (MSAE) for the youth before disbursement of credits.

Lack of initial saving is the most popular factors that determine the youth to participate in micro and small agricultural enterprises (MSAE). The government should make facilitation for credit without initial saving.

Inadequate institutional capacity like limited access to extension services, training programs, credit facilities, and market linkages can restrict youth ability to engage in micro and small agricultural enterprises (MSAE). The government should make strong support on training and facilitate credit and market linkages.

The commitment and impartiality of officials starting from kebele to organizing body level is the most significant factor that should be observed in close manipulation. In the study area there is lack of commitment and giving priority by officials for their relatives during enterprise organization. The government should manipulate the organizing body in close follow up to prevent such impartiality and lack of commitment.

The support of government in different level plays significant role in the participation as well as success of micro and small agricultural enterprises (MSAE) enterprises. The government should reduce bureaucracy and loan delay.

By addressing these recommendations, stakeholders can foster an environment that encourages youth involvement in micro and small agricultural enterprises, ultimately contributing to sustainable economic development in the study area.

6. REFERENCES

- Ahmed, M., M. A., S.Ehui, & Y. Assefa. (2004.). Dairy development in Ethiopia. *International Food Policy Research Institute. Washington, U.S.A.*
- Asmare, Y., & Mulatie, M. (2014). A Tale of Youth Graduates Unemployment. *Global Journal of Human-Social Science: Arts & Humanities - Psychology, Volume 14 (4).*
- B. White. (2020). ‘Prelims - Agriculture and the Generation Problem’,. *Agric. Gener. Probl.*, vol. 43,no.6, pp. i-xii.
- Berihu, H., Aleme, A., & Mulata, H. (2014). Constraints of Livestock Development in Eastern Zone ofTigray; the case of “GantaAfeshum Woreda” Northern Ethiopia. *Agricultural Science, Engineering and Technology Research*, 2 (1), pp. 1-9.
- C. S. A. (2010). Agricultural Sample Survey: Livestock, Poultry and Beehives population (private peasant holdings). Federal Democratic Republic of Ethiopia. (CSA), *Addis Ababa, Ethiopia.*
- CSA, C. S. A. o. E. (2017).
- Dana, N., Duguma, R., Teklewold, H., & Aliye, S. (2006). Transforming village poultry systems into small agro-business ventures: a partnership model for the transfer of livestock technologies in Ethiopia. . *Livestock Research for Rural Development*,, 18.
- Davis,D., et al.(2018). Activating Learning at Scale A Review of Innovations in Online Learning Strategies. *Computers & Education. Scientific Research Publishing*,125, 327-344.
- Demissu Hundie, Gebeyehu Goshu, Tamir, B., & Gemedu Duguma. (2019). Assessment on rural poultry production and marketing system of Horro chicken ecotypes in Western Ethiopia. *Journal of Agricultural Extension and Rural Development*,, Vol. 11 (12), , pp. 248-259.
- Department, S. Z. P. (2021). Annual Statistical Abstract.
- Devèze, J. C. (2011). Challenges for African agriculture. *International Bank for Reconstruction and Development and Paris Agence Française de Développement, World Bank.*
- Duguma, B., Tegegne, A., & Hegde, B. P. (2012.). Smallholder livestock production system in Dandi district, Oromia Regional State, central Ethiopia. *Read and write*, 20, pp. 25-26.
- Eshetu, S., & Ahmed, H. M. S. (2022). The impact of remuneration policy on employee’s performance: Evidence from Dashen Bank in Ethiopia. *International Journal of Innovation Scientific Research and Review*,, 4(4);, 2592-2599.
- Ethiopian Investment Agency. (2012). Investment Opportunities Profile for production of fruits and vegetables in Ethiopia.
- Etim,N. A., & Udo, S. (2020). "Factors Influencing Youth Participation in Agriculture: Evidence from Nigeria.". *Journal of Agriculture and Food Systems Research*, 5(1), 45-56.
- FAO. (2011.). The State of Food and Agriculture 2010-11:women in agriculture. Closing the gender gap for development.
- FAO. (2012). Message from the Food and Agriculture Organization of the United Nations on the occasion of the 17th International Day of Co-operatives “Youth, the future of cooperative enterprise” Unpublished.
- F. M. D. A., (2011). Improved MSE strategy of Ethiopia, A.A.

- G. M. Fola, T. A., and H. Tafesse, (2021). ‘Determinants of Rural and Peri-Urban Youth Participation in Small and Micro Agricultural Enterprises in Southern Ethiopia’. *vol. 4413, no.9*, pp. 96–102, .
- Gashaw, T., Asresie, A., & Haylom, M. (2014). Climate change and livestock production in Ethiopia. *Adv. Life Sci., Tech*, 22, pp. 38-42.
- Gitore Mulugeta Fola, Tsadiku Alemu, & Tafesse, H. (2021). Determinants of Rural and Peri-Urban Youth Participation in Small and Micro Agricultural Enterprises in Southern Ethiopia. *Volume-4(Issue9)*.
- Habte, M., Ameha, N., & Demeke, S. (2013). Production performance of local and exotic breeds of chicken at rural household level in Nole Kabba Woreda, Western Wollega, Ethiopia. *African Journal of Agricultural Research*, 8 (11), pp.1014-1021.
- Haile Welearegay, Yilma, Z., & Yosef Tekle-Giorgis. (2012). Challenges and opportunities of milk production under different urban dairy farm sizes in Hawassa City, Southern Ethiopia, . *African Journal of Agricultural Research*, Vol. 7 (26), pp. 3860-3866.
- Harjula, H. (2008). Scoping study on the inclusion of releases and transfers from small and medium- sized enterprises (SMEs) in PRTRs“. *environment directorate. Organization for Economic Co-operation and Development: Paris, France*.
- Idowu James Fasakin 1, A. I. O., Lateef Olalekan Bello 3,4,*, Djana Mignouna 5 ., & Razack Adeoti 5, Z. B., Tahirou Abdoulaye 4 and Bola Amoke Awotide. (2022). Impact of Intensive Youth Participation in Agriculture on Rural Households’ Revenue: Evidence from Rice Farming Households in Nigeria
- J. R. Lindner, & Lindner, N. J. (2024). Interpreting Likert-type Scales, Summated Scales, Unidimensional Scales, and Attitudinal Scales: I neither Agree nor Disagree, Likert or Not. *Advancements in Agricultural Development*, 5(2).
- Kassa, T., et al. . . (2023). "Determinants of Youth Participation in Agricultural Enterprises: Evidence from Southern Ethiopia." *African Journal of Economics and Business Research (AJEBR)*, 1(2), 19-32.
- Kassie, M., et al. . (2018). "The Role of Institutional Support in Youth Participation in Agricultural Production: Evidence from Ethiopia." *Agricultural Economics*, 49(3), 345-356.
- Khan, M. A., & Kausar, A. (2020). "The Role of Training in Enhancing Youth Participation in Agriculture: Evidence from Pakistan." *Journal of Agricultural Education and Extension*, 26(2), 123-138.
- Khan, M. A., & Kausar, A. (2020). "The Role of Income in Youth Participation in Agricultural Enterprises." *Journal of Agricultural Economics*, 71(2), 245-260.
- Leavy, J., & N. Hossain. (2014.). ‘Who Wants to Farm? Youth Aspirations, Opportunities and Rising Food Prices. *IDS Work.Pap.*, vol. 2014, no. 439, pp. 1-44,.
- Loki O, & Mdoda, L.(2023).ASSESSING THE CONTRIBUTION AND IMPACT OF ACCESS TO EXTENSION SERVICES TOWARD SUSTAINABLE LIVELIHOODS AND

- SELF-RELIANCE IN EASTERN CAPE PROVINCE, SOUTH AFRICA. *Afr. J. Food Agric. Nutr. Dev.* 2023, 23(4), 23000-23025.
- Maïga, E., Christiaensen, L., & Palacios-Lopez, A. (December, 2015). Are Youth Exiting Agriculture en Masse. In *STAARS Conference in Addis Ababa*.
- Mangal, H., : . (2009). Best Practices for Youth in Agriculture. *The Barbados, Grenada and Saint Lucia Experience. Final report*.
- Mastewal, Y., Tewodros, T., Herman, S., Addisalem, A., & Selome, K. (2020). “Policies and interventions for rural youth employment in Ethiopia: a synthesis of literature review,” Realising Sustainable Agricultural Livelihoods Security in Ethiopia. (*BENEFIT-REALISE*) Program.
- Mitiku Eshetu, Seyoum, M., & Yesihak Yusuf Mammed. (2019.). Milk production, marketing practices and qualities along milk supply chains of Haramaya District, Ethiopia. *African Journal of Agricultural Research*, Vol. 14 (35), pp.1990-2005.
- Moreda., T. (2020.). Review on Factors Affecting Youth Participation in Agribusiness in Ethiopia. *Plant*, Vol. 8, No. 4,, pp. 80-86.
- Naamwintome, B. A. a. B., . . (E., 2013). *Youth in agriculture: Prospects and challenges in the Sissala area of Ghana.* , *Net Journal of Agricultural Science*, 1 (2), , pp. 60-68.
- Nkhata, B., & Mbewe, S. (2019). The Role of Gender in Youth Participation in Agriculture: Evidence from Malawi. *African Journal of Agricultural Research*, 14(12), 648-657.
- Özçatalbaş, O., & M. Imran, no. June. (2020). Linking Youth Empowerment with Agricultural Production and Food Security.
- S. Batisa, Int. J. Res. Bus. Stud. Manag. (2019). Determinants of Youth Based Micro and Small Enterprises Growth in Dawro Zone A Case of Mareka Wereda’, vol. 6, no. 12, pp. 27–37, .
- Seid Mohamed, & Destaw Muluye. (2022). Determinates of Rural and Per-Urban Youth Participation in Micro and Small Agricultural Enterprises in Gurage and Silte Zone. *American Journal of Environmental and Resource Economics*, Vol. 7, No. 1, , pp. 1-7.
- T. Moreda. (2020.). Review on Factors Affecting Youth Participation in Agribusiness in Ethiopia. *Plant*, vol. 8, no. 3,, p. 80.
- Taye, T., & Lemma, H. (2009.). Traditional Backyard Cattle Fattening in Wolayta: Systems of Operation and the Routine Husbandry Practices. *Ethiopian Journal of Animal Production*, 9 (1), p. 39.
- Tefera, A. (2013.). Grain and feed annual. *Np: Global Agricultural Information Network, Rep. no. ET-1301.* .
- UNIDO. (2002). Rural enterprise development support project. Entrepreneurial Skills for Group Based SMEs. Trainers Manual. *annual_report_2002_engl_0.pdf*.
- Zenebe, G., & van Kooten G. Cornelis. (2020). Poor harvests and storage facilities.

7. APPENDICES

7.1. Appendix-1: Appendix Tables

Probit model for micro and small agricultural enterprise, goodness-of-fit test

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. estat gof
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Probit model for MicroAndSmallAgriculturalEnterpr, goodness-of-fit test

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      number of observations =      204
number of covariate patterns =      204
      Pearson chi2(189) =      164.79
           Prob > chi2 =      0.8976

```

Source: own survey data, 2024

multicollinearity test for the probit model estimation

```
. vif
```

Variable	VIF	1/VIF
Age	1.90	0.527654
MaritalSta~s	1.87	0.534295
AwarenessC~g	1.40	0.716156
Weakinstit~y	1.30	0.766559
participat~r	1.28	0.778347
Bureaucrac~s	1.22	0.821998
extensionc~t	1.19	0.837123
Landavilai~y	1.18	0.845272
InitialSav~g	1.18	0.846810
LackOfComm~s	1.12	0.891305
AnnuaiIncome	1.12	0.892079
LoanDelaye~h	1.12	0.893677
Gender	1.10	0.912887
Education	1.07	0.931147
Mean VIF	1.29	

Source: own survey data, 2024

probit model regression result

. mfx

Marginal effects after probit

y = Pr(MicroAndSmallAgriculturalEnterpr) (predict)
= .77272013

variable	dy/dx	Std. Err.	z	P> z	[	95% C.I.	]	X
Gender*	.1859399	.08401	2.21	0.027	.021274	.350605	.637255	
Age	.0385281	.01409	2.73	0.006	.010914	.066143	26.7353	
Educat~n	.0221462	.01117	1.98	0.047	.00025	.044043	5.7598	
Marita~s	-.1243401	.10127	-1.23	0.220	-.322821	.074141	1.46569	
Annuai~e	4.00e-06	.00000	2.89	0.004	1.3e-06	6.7e-06	65969.9	
Landav~y*	.4180361	.18765	2.23	0.026	.050256	.785816	.916667	
Awaren~g*	.2233297	.07931	2.82	0.005	.067892	.378767	.470588	
Initia~g	.1580219	.05286	2.99	0.003	.054413	.26163	2.7549	
Bureau~s*	.0427701	.16013	0.27	0.789	-.27107	.356611	.916667	
Weakin~y	.0865206	.03237	2.67	0.008	.023079	.149962	2.4902	
LackOf~s*	-.2063992	.07713	-2.68	0.007	-.357571	-.055227	.539216	
LoanDe~h	-.0261579	.01077	-2.43	0.015	-.047273	-.005043	5.35294	
partic~r	-.0655497	.10736	-0.61	0.541	-.275962	.144863	4.51471	
extens~t	.019084	.00289	6.61	0.000	.013422	.024746	23.098	

(*) dy/dx is for discrete change of dummy variable from 0 to 1

Ordered probit regression				Number of obs	=	204
				LR chi2(14)	=	73.55
				Prob > chi2	=	0.0000
Log likelihood = -95.054462				Pseudo R2	=	0.2790
level	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
Gender	-.0186462	.2266935	-0.08	0.934	-.4629572	.4256649
Age	.0056301	.0390978	0.14	0.885	-.0710001	.0822604
Education	.0725205	.0293513	2.47	0.013	.014993	.1300481
MaritalStatus	.2730114	.2765629	0.99	0.324	-.269042	.8150647
AnnuaIncome	1.58e-06	3.68e-06	0.43	0.668	-5.63e-06	8.79e-06
Landavilailabi~y	.2815251	.448552	0.63	0.530	-.5976207	1.160671
AwarenessCreat~g	-.0091798	.2429161	-0.04	0.970	-.4852867	.4669271
InitialSaving	-.0503717	.1418579	-0.36	0.723	-.3284081	.2276647
BureaucracyCha~s	.9208331	.4783156	1.93	0.054	-.0166482	1.858314
Weakinstitutio~y	-.177583	.0867147	-2.05	0.041	-.3475407	-.0076254
LackOfCommitme~s	-1.005396	.2214339	-4.54	0.000	-1.439398	-.5713934
LoanDelayedby~h	-.1291482	.0323325	-3.99	0.000	-1.1925187	-.0657777
participation~r	-.7762498	.2751183	-2.82	0.005	-1.315472	-.2370279
extensioncontact	.0017603	.0076166	0.23	0.817	-.013168	.0166885
/cut1	-2.637419	1.589359			-5.752504	.477667

Ordered probit regression		Number of obs = 204				
		LR chi2(14) = 91.58				
		Prob > chi2 = 0.0000				
Log likelihood = -93.94937		Pseudo R2 = 0.3277				
	intesity	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
	Gender	.057065	.2288556	0.25	0.803	-.3914837 .5056138
	Age	.0153574	.0395181	0.39	0.698	-.0620968 .0928115
	Education	.0762256	.0301759	2.53	0.012	.017082 .1353692
	MaritalStatus	.2987898	.285196	1.05	0.295	-.2601841 .8577637
	AnnualIncome	.0000117	3.40e-06	3.44	0.001	5.01e-06 .0000183
	Landavailability	.0313064	.4572219	0.07	0.945	-.864832 .9274448
	AwarenessCreationAndTraining	.51931	.2412249	2.15	0.031	.0465178 .9921021
	InitialSaving	.0636319	.1442125	0.44	0.659	-.2190193 .3462832
	BureaucracyChallenges	.2134291	.5068266	0.42	0.674	-.7799328 1.206791
	LackOfCommitmentsbyofficials	-.5272492	.2227018	-2.37	0.018	-.9637368 -.0907616
	LoanDelayedbymonth	-.1131824	.0302964	-3.74	0.000	-.1725623 -.0538025
	Weakinstitutionalcapacity	-.2087255	.0870734	-2.40	0.017	-.3793862 -.0380648
	participationalatitudedefactor	-.833093	.3222002	-2.59	0.010	-1.464594 -.2015923
	extensioncontact	-.0058949	.0076568	-0.77	0.441	-.020902 .0091122
/cut1		-2.388418	1.759717			-5.8374 1.060565

Section A: Demographic Information

1. Name of the woreda: _____ kebele: _____

2. What is your gender?

Male ☐ Female ☐

3. Age of the respondent in years -----

4. What is your educational level in years of schooling? ----- specify the category.

A. Who can't read and write ☐ B. Primary School ☐ C. High school ☐

D. Certificate ☐ E. Diploma ☐ G. Degree ☐

F. TVET (Level I-V) ☐ H. Masters and Above ☐

5. What is your marital Status?

A. Single ☐ B. Married ☐

C. Widowed ☐ D. Divorced ☐

6. What is your current employment status?

A. Employed in the agricultural sector ☐ B. Employed in a non-agricultural sector ☐

C. Unemployed ☐ D. Self-employed ☐

Section B: Factors Affecting Youth Participation in Micro and Small Agricultural Enterprises

1. Are you currently involved in any micro and small agricultural enterprise?

A. Yes ☐ B. No ☐ 2. If yes, what type of agricultural enterprise are you involved in? (Check all that apply)

- A. Crop production ☐ B. Livestock production ☐
C. Dairy Farm ☐ D. small scale irrigation ☐
E. Oxen Fattening ☐ F. sheep and goat fattening ☐
G. poultry ☐ H. others (If any state it) ☐

3. What motivated you to participate in agricultural enterprises?

- A. Job opportunities ☐ B. Availability of resources (land, water, etc.) ☐
C. Family tradition ☐ D. Personal interest in agriculture ☐
E. Government support or incentives ☐

4. How important is agriculture as a source of income for you?

- A. Very important ☐ B. Somewhat important ☐
C. Not important at all ☐

5. What is your annual income from your business activities during the last 12 months in Ethiopian birr -----?

6. Did you have established market linkage?

- A. Yes ☐ B. No ☐

7. If yes, what did you benefited from the established market linkage?

- A. Very High-Income ☐ B. High income ☐
C. Medium income ☐ D. low income ☐

8. Do you own land?

A. Yes ☐

B. No ☐

9. If yes, how much is the size of the land in hectare? -----

10. For #Q 8 who provide the land?

A. From Government ☐

B. From Family ☐

C. It is own land ☐

D. By Rent ☐

11. If the land is provided by rent, how much did it cost per year in Ethiopian birr?

12. Did you got awareness creation or training about agricultural practices?

A. Yes ☐

B. No ☐

13. If yes, what kind of training was given?

A. Crop production ☐

B. Livestock production ☐

C. Dairy Farm ☐

D. small scale irrigation ☐

E. Oxen Fattening ☐

F. sheep and got fattening ☐

G. poultry ☐

H. others (If any state it) ☐

14. For #Q 12, if yes, specify frequency of training given per year in number? -----

15. What is the major source of initial saving to start your business?

A. Personal saving ☐

B. Family ☐

C. Friends/Relatives ☐

D. Iqub/Idir ☐

16. Is there any bureaucracy challenges throughout the process?

A. Yes ☐

B. No ☐

17. If yes, in which level or steps did the bureaucracy challenges showed or happened?

A. At woreda enterprises office ☐ B. At woreda omo micro finance office ☐

C. At officials' level ☐ D. At experts' level ☐

18. Did the experts or officials had commitments to give advice to participate in micro and small agricultural enterprises?

A. Yes ☐

B. No ☐

19. If yes, how often they give advice per year in number? -----

20. Did you get loan for your business in last year?

A. Yes ☐

B. No ☐

21. Is there a delay in disbursement of funds or the approval process for a loan?

A. Yes ☐

B. No ☐

22. For #Q 21, If yes, for how long did the loan delayed? -----

23. How much do you agree with the following statements?

Please indicate the degree to which these factors are affecting the participation of youth in micro and small agricultural enterprises. After you read each of the factors, evaluate them in relation to your business and then put a tick mark (✓) under the choices below. Were, 5 = Strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree and 1 = Strongly Disagree.

No	Factors Affecting Youth Participation in Micro and Small Agricultural Enterprises	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
1	Participation attitude factor	5	4	3	2	1
1.1	Access to initial saving is a major challenge for youth participation in micro and small agricultural enterprise.					
1.2	Access to markets is a major challenge for youth participation in micro and small agricultural enterprise.					
1.3	Access to land is a major challenge for youth participation in micro and small agricultural enterprise.					
1.4	Awareness or information is a major challenge for youth participation in micro and small agricultural enterprise.					
1.5	Access to bureaucracy challenge is a major challenge for youth participation in micro and small agricultural enterprise					
1.6	Access to loan delay is a major challenge for youth participation in micro and small agricultural enterprise					
2	Institutional capacity related factor					
2.1	The government provides sufficient credit access for youth participation in micro and small agricultural enterprises.					
2.2	Youth are encouraged by sufficient access to market linkage to participate in micro and small agricultural enterprises.					

7.3. Focus Group Discussion Questionnaire:

Suggestions for Improving Youth Participation in in micro and small agricultural enterprises

1. What measures can be taken to encourage more youth to participate in micro and small agricultural enterprises according to: -

A. Provide financial support (provide loans, initial saving):- -----

B. Improve access to land :- -----

C. Improve access to markets :- -----

E. Avoid availability bureaucracy challenges :- -----

E. Provide more training and capacity-building programs :- -----

2. Do you have any other suggestions or comments on improving Youth Participation in in micro and small agricultural enterprises?

