An Assessment of Factors Affecting Rural Households Savings Habit: The Case of Mana District, Jimma Zone, Oromia Regional State, Ethiopia

A Thesis Submitted To the School Graduate Studies of Jimma University in Partial Fulfillment of the Award of the Degree of Masters of Business Administration (MBA)

By:

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JIMMA UNIVERSITY

COLLEGE OF BUSINESS & ECONOMICS

MBA PROGRAM

JUNE, 2017

JIMMA, ETHIOPIA

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Under the Guidance of

Chalchissa Amante (Assistant prof. & PHD candidate)

And

Mr. Wendmu Abule

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CERTIFICATE

This is to certify that the thesis entities "Assessment of Factors Affecting Rural Households Savings Habit: A Case Study of Jimma Zone Mana District ", Submitted to Jimma University for the award of the Degree of Master of Business Administration (MBA) and is a record of Valuable research work carried out by Mr. Kumsa Chemeda, under our guidance and supervision

Therefore, we hereby declare that no part of this thesis has been submitted to any other university or institutions for the award of any degree of diploma.

Main Adviser's Name	Date	Signature
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Co-Advisor's Name	Date	Signature
Mr. Wendmu Abule	_____	_____

DECLARATION

I hereby declare that this thesis entitled "*Assessment of Factors Affecting Rural Households Savings Habit: A Case Study of Jimma Zone Mana District*", has been Carried out by me under the guidance and supervision of Mr. Chalchisa Amante and Mr. Wendmu Abule.

The thesis is original and has not been submitted for the award of the degree of diploma any university or instructions.

Researcher's Name	Date	Signature
Kumsa Chemeda	28/6/2017 G.C	_____

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ACRONYMS OR ABRIVATIONS'

AEMFI	Association of Ethiopian Microfinance Institutions
APC	Average Propensity to Consume
ASCAS	Accumulation savings and credit association
CEX	Consumer Expenditure Surveys
CSA	Central Statistics Agency
EEA	Ethiopian Economic Association
ETB	Ethiopian Birr
FFIs	Formal Financial Institutions
FSC	Farmers Service Cooperatives
GDP	Gross Domestic product
GLSS	Ghana Living Standards Survey
GSS	Ghana Statistical Service
GTP	Growth and Transformation Plan
HH	Household
IFIs	Informal Financial Institutions
LCH	Life Cycle Hypothesis
MoFED	Ministry of Finance and Economic Development
MFIs	Micro Finance Institutions
MPC	Marginal propensity to consume
NBE	National Bank of Ethiopia

NGOs	Non Governmental Organizations
OCSSC	Oromia Credit and Saving Share Company
ROSCA	Rotating savings and credit association
SACCOs	Savings and credit cooperative societies
SSA	Sub-Saharan Africa
EPRDF	Ethiopian People's Revolutionary Democratic Front
VIF	Variance Inflation Factors

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Abstract

This study was initiated with the objective of identifying major factors affecting rural households' savings habit in Mana district, Jimma Zone of Oromia regional state, Ethiopia. It was selected purposively due to its potential for commercial area, access to form financial institutions, socio-economic infrastructure, access to information, and the location advantage. For the purpose of the study data were collected from 149 samples of rural household's heads by using primary data. For data analysis, descriptive statistics and econometric model were used. The descriptive results of the study showed that 46 (30.9%) of the sampled households head had savings in formal financial institutions where as 103 (69.1%) of the sampled households had no saving in formal financial institutions. Among 15 explanatory variables, five, namely sex, age, family size, marital status, religion are not statistically significant while, the remaining ten were; education level, average of annual income, average of annual expenditure, distance from market center, distance from formal financial institutions, access to credit services, access to information, transaction cost, saving interest rate and access to training were found to have significantly effect on rural households' saving habit. During a binary logistic regression variables significant at less than p-value <0.2 was shifted to multiple variable logistic regressions to avoid the role of cofounder and adjusted odds ratio is estimated and factors affecting household's saving habit was identified at the cut point of p-value less than 0.05. However, multi-variable regression model were identified four the most risk variables influence on households saving habit. These variables were namely: educational levels of households Distance from market center, Access to training and annual expenditures. Based on the study results the researcher recommended that it is better to design strategies and policies that promote formal and informal educational opportunities, create awareness and motivation through training in order to improve saving the culture of rural households and as well as develop strategies to take a measure to minimize their unplanned expenditures.

Key terms: - *Jimma Zone, Mana woreda, Rural households, Saving habit*

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

Saving is important in improving the well-being and serves as a financial security at the time of shocks for the households (Chowa, 2006). Loibl *et al.,* (2011) noted that "the habit of savings plays an important role in everyday financial decisions". To them, the constant act of saving is very important to the financial independence and stability of households. Even though habit formation is not an easy act, once the habit of savings is formed, it affects one's saving ability. Habit formation improves a person's perception and intention towards saving Loibl *et al.,* (2011). Allesie and Lusardi (1997) also believe that once the habit is formed, it tends to have an effect on an individual's consumption and savings.

Many people hold the view that, saving is a moral habit, and that person will need to save since the future is not known to them (Olson & De Frain, 2000). There is the belief that many individuals and families in both developed and developing countries believe that savings serve as a form of financial security to them. For those individuals and families who hold the view that they have to spend whatever they earn today and allow the future to provide for itself, savings is not an option (Olson & De Frain, 2000). Several studies have revealed that several factors like socio economic, institutional, demographic determine savings at the household level. Rehman *et al.,* (2011) investigated the factors affecting saving of different income groups in Pakistan. In Sub-Saharan Africa, as stated by Devaney, *(*2007) many rural households have poor saving culture. As a result, low level of household savings is said to be one of the reasons for slow and stagnant economic growth in the developing countries. In addition as stated by Quartey and Blankson, (2008) have done in Ghana, stated that many factors that influence the level of household savings. Some of the factors they identified were age, income, marital status, education level, employment, expectation.

In Ethiopia the rural households' saving habit is found to be limited and only six million households save money in formal financial institutions with an average of 875 Birr per year (Aron *et al.*, 2013).

The average gross saving rate as percentage of GDP of Ethiopia was 21% . Recognizing this fact, the country has planned to promote the savings habit among rural households. Money saved stands a greater chance of increasing to ensure the financial security of the family. Knowledge about the available financial institutions, safety of the outlet, ease of accessibility, level of return among others, are some of the factors that are likely to influence the saving behaviour of the households (Tsega and Yemane, 2014).

Rural families in the study area are predominantly farming communities. Most of the households are farmers who cultivate in mainly agricultural products including coffee and chat production as well as vegetables and most of their earnings are considered permanent. As a result, the incomes of these families are likely to be only enough to meet their basic needs. In situations where family income is only able to meet the needs of the family, savings, is usually not a consideration.

Households saving is, therefore, one of the most important components of the national saving that needs emphasis. This study therefore aims to assess the factors influencing rural households saving habit in Mana District.

1.2. Statement of the Problem

Understanding the nature of household savings habit is critical in designing policies to promote the savings habit (Attanasio and Banks, 2001). Globally, many researches were conducted regarding on savings. However, the empirical evidence appears to suggest that the impact of demographic, socio-economic and institutional factors on household savings habit is not uniform across countries. For example Gedela, (2012) found that income is affected by education, land holding, agricultural expenditures, and number of family members involved in agricultural activity and the rate of saving are affected by age, education, health expenditure, and income.

According to (Alma and Richard, 1988) analyze that income, education; the assets of the household and interest rate were the most important variables affecting savings behavior among rural households in the Philippians.

John and Grant, (1998) analyze that the effects of socio-demographic factors on savings rate to obtain an insight into household savings behavior in New Zealand. They found that age of a household head has a positive significant effect on household savings.

(Mark *et al.,* 1999) researched into determinants of household savings behaviour in Australia by fitting a probit model. The empirical results of their study showed that gender, income level, age and household asset and size were found to have a significant effect on savings whereas interest rate was not significant. Households decision to or not to save, how much to save, the frequency of saving, where to save and the forms of saving they engage in are influenced by demographic and socio economic factors (Modigliani and Brumberg, 1954 and 1980).

In most African countries there are various reasons, including low and irregular income and lack of access to financial services, have been contributing to the low savings rate particularly in SSA. In addition, institutional factors, and higher expenditure patterns have found to be associated with lower levels of saving in SSA (Beck *et al*., 2008). As stated by (Kibet *et al*., 2009) in rural areas of Kenya, the findings were indicated that education, interest rate, income, occupation and services provided by financial institutions have a positive significant impact on savings.

In Ethiopia very few studies have been conducted to assess saving behavior among rural households (Kidane, 2010). Even, most of these researches were done at the macro level as stated by (Girma *et al.*, 2014).

On the basis of review of previous studies it is found that various studies are conducted on issues like relationship between saving and investment, determinants of rural and urban saving behavior, factors affecting saving and investment preferences etc. There exists a study gap in this area. So, the current research paper seeks to analyze the socio-economic, demographic and institutional factors affecting rural household's savings in Mana District.

1.3. Research questions

The above discussions lead to the emergence of the following relevant research questions;-

1. What are the effects of demographic factors on rural households saving habit in study area?
2. Do a socio-economic factors influence the rural households saving habit in the study area?
3. What are the effects of institutional factor on saving habit in rural households in study area?

1.4. Objectives of the study

1.4.1. General objective

The general objective of the study was to assess factors affecting rural households' savings habit in Mana District, Jimma Zone, Oromia Region, Ethiopia, 2017

1.4.2. Specific objectives

The specific objectives of the study were as follows:

- To analyze the influence of demographic factors on saving habits among rural households in the study area.
- To identify the effects of socio-economic factors on rural households saving habit in Mana.
- To investigate the effects of institutional factors on rural households saving habit in Mana.

1.5. Significance of the Study

In a country which majority of the people lives in rural areas, formal financial saving has the highest importance for promoting rural households' savings by investigating or assessing the factors affecting saving habit among the rural household's in the study area.

Moreover, conducting this survey research, the researcher believes that various stakeholders will benefit from its findings. This can be explained as follows.

Doing research on household saving is important for policy makers and serves as an input for concerned bodies including banks and microfinance institutions. So that those institutions can mobilize deposits from those household's as they will learn the saving habit of the households. In addition, the study results will serve as a reference and gives an indication for other researchers.

The recommendations given by the researcher are also important to formulate strategy and policy for woreda concerning sectors and financial institutions.

1.6. Scope of the study

This study was carried out to assess the factors affecting rural household's savings habit in rural communities: a case study of Mana district of the Jimma Zone. It was covered four rural kebeles in the district which have a better experience on formal savings and socio-economically better off peasant associations in the area. The study simply defines only factors affecting rural households' savings habit in the study area within a given period of this research.

Therefore, this paper was attempting objectively to identify major factors of the rural savings habit of household's level, focusing on the effects of the demographic, socio-economic and institutional characteristics of the households saving habit. The study was conducted from October, 2016 to June, 2017.

1.7. Organization of the Thesis

Chapter one deals with the introduction of the study. Chapter two dealt with a review of relevant literature. Chapter three covered the methodology employed to conduct the study. Chapter four dealt with the findings analysis and the discussions of the findings whiles the final chapter, chapter five, covered the summary, conclusions and recommendations based on the findings of the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2. Theoretical review

The following the approaches are the basic savings theories relate income to savings, including those of the Absolute income hypothesis by Keynes (1936), Relative Income Hypothesis by Duesenberry (1949), the Permanent Income Hypothesis by Friedman (1957) and the Life Cycle Hypothesis (LCH) by Ando and Modigliani (1963) and Katona's theory otto (2009). These theories suggest different saving concepts.

2.1. Absolute Income Hypothesis

Keynes, (1936) introduced the notion of marginal propensity to save (Keynes' Absolute Income Hypothesis). The theory examines the relationship between income and consumption, and asserts that the consumption level of a household depends on its absolute level (current level) of income. As income rises, the theory asserts, consumption will also rise but not necessarily at the same rate. The idea is that saving is only possible, if someone has more than enough to meet the basic needs. This means that someone can only save what is left over once essentials have been paid for (Ottoo, 2009).

2.2. Relative Income Hypothesis

It was developed by James Duesenberry and it states that individual's attitude to consumption and saving is dictated more by his income in relation to others than by abstract standard of living. So an individual is less concerned with absolute level of consumption than by relative levels. The percentage of income consumed by an individual depends on his percentile position within the income distribution. Secondly it hypothesizes that the present consumption is not influenced merely by present levels of absolute and relative income, but also by levels of consumption attained in previous period. It is difficult for a family to reduce a level of consumption once attained. The aggregate ratio of consumption to income is assumed to depend on the level of present income relative to past peak income (Dusenberry, 1949).

2.3. Life cycle hypothesis theory

The life cycle hypothesis (LCH) theory posits that the main motivation for saving is to accumulate resources for late expenditure and in particular to support consumption at habitual standard during retirement (Modigliani and Brumberg, 1954 and 1980). The basic idea in this theory is that individuals tend to distribute resources to smooth consumption over the life cycle.

The life cycle hypothesis has been utilized extensively to examine savings and retirement behaviour of older persons. Younger people tend to have consumption needs that exceed their income. Their needs tend to be mainly for housing and education, and therefore they have little savings. In middle age, earnings generally rise, enabling debts accumulated earlier in life to be paid off and savings to be accumulated. Finally, in retirement, incomes decline and individuals consume out of previously accumulated savings.

2.4. Permanent Income Hypothesis

The permanent income theory states that people will spend money at a level consistent with their expected long term average income (Friedman, 1957). A worker will only save if his or her current income is higher than the anticipated level of permanent income in order to guard against future declines in income. This theory is relevant to the current study because it considers a person's income as a determinant for their retirement planning. In Friedman's permanent income hypothesis model, the key determinant of consumption is an individual's real wealth, not his current real disposable income. Permanent income is determined by a consumer's assets; both physical (shares, bonds, property) and human (education and experience). These influence the consumer's ability to earn income.

2.5. Katona's theory of savings

Ottoo (2009) noted that "Katona's theory of saving is based on the assumption that saving/consumption is dependent on the ability to save/ consume and the willingness to save/ consume. The theory stressed the importance of income but thought of the absolute income hypothesis as being too simplistic. Simply having money left over after expenditures on necessities does not mean that this money has been saved or will be saved. To predict saving, the willingness to save needs to be considered as well.

In other words, those who are able to save still need to choose to do so, that is, they have to make a decision that requires some degree of willpower. Consumer expectations and consumer sentiment will impact on saving decisions as well as pessimism and optimism with regard to a general and one's personal evaluation of the economic situation. While people save for different reasons, Katona assumes that someone's personal evaluation of the economic situation will influence contractual as well as discretionary saving decisions".

2.6. Determinants of household savings

Households' saving is largely influenced by several variables like the perception of saving of those who save, their ability, willingness, objectives or motivations for saving and the opportunity to save. This deliberate decision on the part of the household to save in order to meet future needs depends on a number of factors. The factors normally considered as the determinants of saving include all the factors that affect the ability to save, the will to save and the opportunity to save.

2.6.1. Income

One of the basic determinants of savings which almost all the studies in the area of savings have tried to study is income. Different studies using different methods have been conducted in different parts of the world and all have found a positive relationship between income and savings. Based on the findings, some scholars have propounded certain theories.

In Kenya, household income was found to be a statistically significant predictor of savings among rural farmers, entrepreneurs, and teachers (Kibet et al., 2009). A similar result was found in Uganda, where higher permanent and transitory incomes significantly increased the level of net deposits among households that reported owning bank deposit accounts (Kiiza & Pederson, 2001).

2.6.2. **Interest rate**

Mottura (1972) believes that the sum to be gained by interest rate, even if it is high, normally has little economic significance to savers, who deposit or invest amounts in a small average volume. Therefore the saving behavior is not merely motivated by the interest rate and savers do not seem to be particularly interest-sensitive. Rather the formulation and accumulation of savings at the household level appears to be strongly motivated by the following factors: the need for insurance,

the need for credit, the feeling of social obligation, and the planning of future expenditure (consumption and investment).

2.6.3. Demographic Characteristics

2.6.3.1. Gender

Denizer *et al.*, (2000) in the analysis of the household savings in the Transition using data from Bulgaria, Hungary, and Poland noted that households headed by women exhibit significantly higher savings rates than that of men in these three countries. Embrey and Fox, (1997) noted that the combination of lower earnings, lower savings, longer life spans, and higher risk aversion pose greater challenges for financial educators and policy makers.

2.6.3.2. Age

As stated by Rehman *et al.*, (2010) he found that age has a positive relationship with household savings. The life-cycle hypothesis suggests that there exists a relationship between age and saving rates. When the age of the households increases their saving status going decreases.

2.6.3.3. Education

Dell'Amore, (1977) stated that individual natural factors are always in various measures influenced by education, so far as it enlarges the technical and social knowledge which directly or indirectly governs all human actions.

2.6.3.4. Family size

It has been argued that the higher the household size, the higher the consumption pattern and all things being equal, the lower the excess money left for consumption.

The difference in the findings of Elfindri, (1990) and Browning and Lusardi (1996) stems from the fact that Elfindri looked at household size in general whiles Browning and Lusardi extended their study to include composition. Thus, by composition, a household with many of its members working while have a positive effect on savings whiles a household with many of its members being dependents will have a negative effect on savings. But taking the household size as a whole, there is likely to be a negative relationship with savings.

2.7. Global Overview of Rural Household's Savings

Saving service has been one of service being delivered by financial institutions. People prefer different options to put their money. A study conducted in India indicated that 51% respondents put their money in the bank and 36% of the households still prefer to keep cash at home. The national survey finding further has indicated that the Indian has got strong saving habit despite the saving patterns differs in income, education level and occupation. The study has shown that 83% and 81% of the households have made saving for the key priority areas such as emergency and children's education, respectively.

Rural household saving in Africa and research from Ghana showed that only 10 percent of the wealthiest households increase their savings along with income (Aryeetey, 2004 cited in United Nation, 2007). The pattern of rural household saving has been irregular in connection to the frequent swing between saving and no saving and this irregularity of saving could result in changing the preference of saving instruments towards the most liquid and accessible (Deaton, 1990 cited in United Nation, 2007). Besides, it is indicated that the rural household saving instruments have been categorized into non- formal saving, informal saving, and formal saving. These savings have been the determinant of financial sources for investment and as the result they have been considered as course of any country's development. However, in Africa, rural household savings consist mainly of physical assets and some financial savings held in the informal financial sector. Thus, only a small part is available for productive investment to exemplify the maximum and the minimum savings deposit rate was 6 percent and 3 percent respectively from a 1998/99 to 2003/04 and of course the maximum and minimum was unfortunately registered at the beginning and ending of mentioned time interval EEA (2004/2005).

2.8. Overview of Rural Households' Savings in Ethiopia

The financial sector in Ethiopia consists of formal, semiformal and informal institutions. The formal financial system is a regulated sector which comprises of financial institutions such as banks, insurance companies and microfinance institutions. The saving and credit cooperative are considered as semi-formal financial institutions, which are not regulated and supervised by National Bank of Ethiopia (NBE).

The informal financial sector in the country consists of unregistered traditional institutions such as Iqub (Rotating Savings and Credit Associations) Idir (Death Benefit Association) and money lenders (Mengistu, 2013.

2.8.1. Formal financial saving

These are institutions that have been engaged in saving and credit/loan service delivery for both rural and urban community and having modern accounting and reporting systems e.g. Private and government Banks and MFI.

I. Banks

Banks are the key financial institutions that provide financial services, thereby highly contributing to the economy of a given country. According to Flamini (2009), the banks in most sub-Saharan African countries have shown an increase to their return as compared to other banks in other developing countries. Banks in Ethiopia have also shown a great improvement in their return on asset (NBE, 2010), (Mengistu, 2013).

II. Microfinance Institutions

Microfinance service has become one of the most prominent instruments in the development programs and strategies of the country (Mengistu, 2013). Microfinance can be defined as the provision of a broad range of client-responsive financial services to poor people through a wide variety of institutions. Microcredit activities in rural Ethiopia were initiated by local and international NGOs (Wolday, 2004).

III. Saving and Credit Cooperatives

According to Wolday (2004), the cooperative movement in Ethiopia took birth in 1950s. Actually the first saving and credit cooperative in Ethiopia was established by the employees of the Ethiopian Road Authority in 1957.

SACCOs develop people's minds by providing motivation, creating initiative, promoting self-development and self-reliance and providing leadership. They also develop material wellbeing by raising the living standards of members, making possible regular savings and wise use of money, providing loans at low interest rate and by making possible economic emancipation of members (Wolff, *et al.,* 2011).

2.8.2. Informal financial saving

In both rural and urban areas in Ethiopia, it is common that neighboring family households organize themselves and develop their own institutions, popularly known as Community-Based Organizations. In most communities, membership in traditional community associations such as *iddirs, iqqubs* and *mehabers* are very common. More importantly, these traditional institutions also play a crucial role in savings and beneficiary mobilization in the informal financial sector Micro Ned (2007).

2.9. Empirical Review

2.9.1. Factors that influence the rural household savings habit

Many researchers have analyzed the major determinants of household savings and have reached different conclusions. Some of these studies are discussed below.

Mark, *et al* (1999), researched into determinants of household savings in Australia. They used the probit model to analyze the effects of various factors that influence household savings behaviour. The empirical results they arrived at were that, gender has significant impact on household savings. They stated specifically that the male has significant positive impact on savings thus males save more than women and the vice versa. They also found out that interest rate has no significant effect on household savings. However, income level, age and household asset were found to have significant positive effects on savings. Household size was also found to have significant and negative effects on savings.

Alma and Richard (1988) in their attempt to analyze savings behavior among rural household in the Philippians regressed income on savings. They found out that, income is the most important economic variable affecting rural savings. Their further result shows that educational, household size and transaction cost negatively influence household savings. However, Schulz (2005) who researched into demographic determinants of savings in Asia found no significant impact of age composition on savings.

A household study of determinants of saving asserts that three factors were influencing household saving behavior in Africa. One of these was the ability to save which in turn depends on a household's disposable income and expenditure.

The second was the propensity or willingness to save as influenced by socio-cultural and Economic factors like the family obligation to educate children. The third one was the opportunity to save and returns on savings (Newman *et al.*, 2008; Orebiy`s *et al*., 2005).

Haruna (2011) employed multiple linear regression analysis in determining the influence of various factors on savings behavior. He found out that income level, educational status, assets of household heads, age and occupation have a positive significant impact on household savings behavior. However, household size turns to have significant negative impact on household savings. On the other hand, Qiuxia (2004), researched into the impact of rural enterprise on household savings in China. He used logit regression analysis and found no significant impact of age on household savings.

Lawrence, *et al.*, (2009), employs multiple linear regressions in analyzing the determinants of household savings in rural areas of Kenya. The findings were that education, interest rate, income, occupation and services provided by financial institutions have significant positive impacts on savings, whereas transport cost and household size were found to have a negative impact on savings. Also, further results show that gender has significant impact on savings. They concluded male turns to save more than women.

A study conducted by Girma *et al.*, (2014) identified determinants of rural households' savings in East Hararghe Zone, Oromia Regional State, Ethiopia. Nine significant determinant explanatory variables of rural households saving were identified which includes household head's education level, livestock holdings, access to credit service, income, investment, training participation, contact with extension, forms of savings and saving motives.

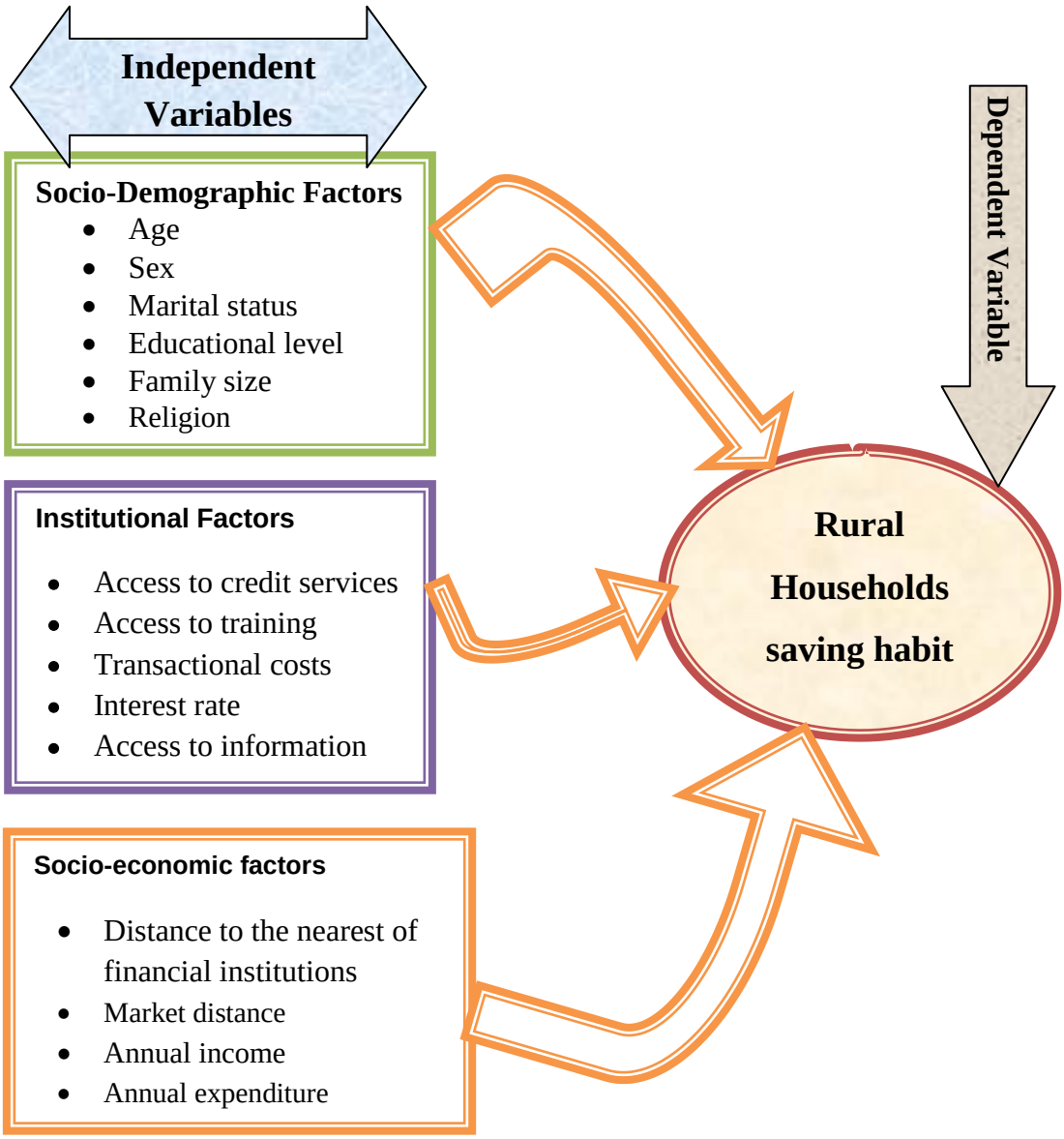
Besides, as reviewed the previous studies, there is little attention given on a micro economic level on the factors affecting rural households' savings habit in Jimma Zone specifically in Mana District. Therefore, this paper attempted objectively to identify major factors of the rural savings habit among household level, focusing on the effects of the demographic, socio-economic, institutional, and variables related to saving institution's characteristics of the households. The study is also intended to contribute to the existing research gap through a better exploration of its factors.

2.10. Conceptual Framework of the Study

The conceptual framework shows the relationship between the independent variables (the interest rate, income level and access to financial institutions) and the dependent variable the households saving status.

According to Gedela (2012) reviewed that the determinants of rural households' savings and the result revealed that the age of the head of the household, sex, income and expenditure are significantly influencing the rural household saving.

Depend on the research results, the researcher developed the following conceptual framework by reviewing different empirical studies. The most important variables expected to affect rural households' savings in the study area includes; demographic (age, marital status, educational status, sex , religion and family size), socio-economic (income level of households, expenditure pattern, and distance from market), institutional (physical distance from financial institutions, credit access and access to training, access of information), and variables related to saving institutions (interest rate and transactional costs). Therefore, the framework was adapted and taken as the guide to discuss, conclude and recommend with regard to household savings status as they are part of the frame work and interdependent.



Source: Own formulation

Figure 1: Conceptual Framework of the Study

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3. INTRODUCTION

This section presents the research methodology and methods employed to conduct the study. The section includes: the study area, target population, source of data, and method of data collection, sampling technique and sample size, and method of data analysis.

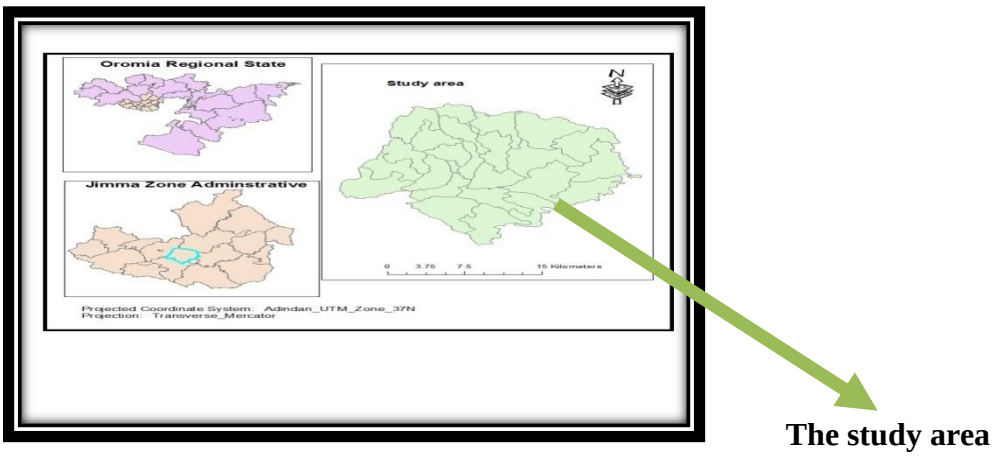
3.1. General Description of the Study Area

The study was conducted in Mana woreda, Jimma Zone of Oromia Regional State, Ethiopia. It is located at 355 km to southwest from Addis Ababa and 20km far from Jimma town. The woreda is bordered on the south by Seka Chokorsa, on the west by Gomma, on the north by Limmu Kosa, and on the east by Kersa. The administrative center of this woreda is Yebu.

The total population of this woreda about 100,065 of whom 96,437 were men and 96,438 were womens. Among the total population, 189,620 live in rural areas, while 6,883 live in urban areas.

In addition to this, there have 22,501 rural households heads, among these 21,341 are male and 1,160 are female headed households.

The district has about 26 Kebeles among these, 24 of them are rural and 2 of them are under the town kebeles. (Agriculture Office of Mana District, 2017)



Source: Agriculture Office of Mana District (2017)

Figure 2 :Map of the study Area

3.2. Research Design and Approach

The major focus of the study was description of information related to saving of rural households by collecting cross sectional data from the study area. So, the research method used for the study was descriptive research design to answer research questions. Moreover, Binary logistic regression model was applied for independent variables which show a significant effect on the saving habit of rural households. This design was preferred because it was an enable the researcher to collect enough information necessary for generalization and summarizes the essential features of data gathered from the study area.

Consequently, the quantitative research approach was employed by supplementing with the qualitative research approach in order to answer all the basic research questions.

3.3. Types and Sources of Data

The study was conducted from primary data to address the objectives of the study.

3.3.1. Primary data

The primary data was derived from the answers that respondents are given in the self-administered questionnaires. The study was design open and closed ended questions to allow deep investigation of households saving habit in the study area.

3.4. Methods of data collection

To address the objectives of the study, survey questionnaires and FGD was used. Primarily, the questions were prepared in English language and then translated to local languages (Afan Oromo and Amharic) then the data collectors from household heads respondents who speak the three languages were trained.

3.4.1. Survey Questionnaire

To address the objectives of the study, closed and open -ended questions were used. For the purpose of data collection, four local enumerators (Diploma holders) who fluently speak and read the study area language, (Afan Oromo and Amharic) was carefully recruited and training was given for data collectors before deployment to the field for one day in each kebeles, Because it enables respondents to give relevant figures related to geographic, socio-economic, and institutional factors on households savings habit.

3.4.2. Focus group discussion

A focus group discussion was a data collection procedure in the form of a carefully planned among selected respondents usually between 4 and 10 (Gatrel and Elliot (2009:80). This discussion was used to obtain additional information on factors affecting rural household's savings. The researcher administered the focus group discussion by telling the objectives of the study and asking permission from financial institutions. After the researcher got permission, three focus group discussions were organized with staff members of OCSSCO and HARBU MFIs. While conducting the focus group discussion, the researcher took note for data analysis.

Information related to reasons for no saving and awareness creation and motivation for savings were collected through the help of focus group discussions.

3.5. Sampling Procedures and Sample Size

3.5.1. Sampling Procedures /Technique/

Multi-stage sampling procedure was employed to select sample households head.

In the first stage, the district was selected purposively due to its potential for commercial business, access to forma financial institutions, socio-economic infrastructure, access to information, and the location advantage. Moreover, as obtained information saving has remained as problem and, of course, such target specific study has not been carried out in selected area. Basically, rural saving issues are expected to be linked to better off households.

In the second stage Stratified random sampling were used to sample rural household heads to participate in the study. Stratified sampling technique is a method in which the researcher divides the entire target population into different sub-groups and then randomly selects the final subject proportionally from different sub-groups according to Kothari, (2006).

The researcher were divided the rural kebeles as near and far using stratified sampling method. The bases of stratification of the kebeles were distance and rural kebeles located 13km far from the financial institutions were considered as near where as rural kebeles located above 13km were taken as far. Then, four representative kebeles selected based on their relative distance from the district town, taking a 13km as a cutoff point.

Thus, based on the above assumption, two far kebeles (Bebela kera and Gube bosoka) and the other two near kebeles (Dewa and LemiLelisa) were randomly selected through drawing lottery vote from both distance categories.

The final stage were random sampling technique was used to select samples from each stratum to take in to considerations.

The sample from four kebeles was determined through applying probability Proportional to Size sampling procedures. Then the actual sample respondents of household's heads were selected using a simple random sampling technique.

Table 1 : Distribution of sampled respondents in kebeles

No	Name of Kebeles	Total Household heads	Sample households
1	Dewa	656	29
2	Lemi Lelisa	915	41
3	Babela kera	730	32
4	Gube bosoka	1063	47
	Total	**N=3364**	**n=149**

Source: Secondary data obtained from MFIS, woreda cooperative and Agri.office 2017

3.5.2. Sample Size Determination

Hence, a sample which is representative of the population was considered in the study. Sampling, according to (Cooper and Schindler, 2001) involves selecting some of the elements in a population and drawing conclusions about the entire population. The compelling reasons behind the decision to sample includes the lower cost, greater accuracy of results and greater ease of data collection associated with sampling. Thus, the sample size for collecting data through household survey was determined by using the sample size determination formula proposed by Yemane, (1967).

The study used the following formula to calculate sample size.

$$\boldsymbol{n = \frac{N}{1+N(e)2}} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \textbf{(1)}$$

Where:

n= Actual sample size;

N= Total number of households head selected from four rural kebeles

e = maximum variability or Margin of error at 8% (modified by researcher).

Therefore, the sample size was determined from the total household's head (**3,364**) of the four rural kebeles of Mana woreda is computed as follows;

Therefore,

$$\boldsymbol{n = \frac{3364}{1+3364(0.08)}2}$$ ***= 149 Household Heads***

Therefore; total sample size was 149 households' head, out of which 70 respondents from near kebeles and the remaining 79 respondents from far kebeles were selected using simple random sampling technique at each sample kebeles. So, Selection was made proportionally from total household head living in far and near both areas.

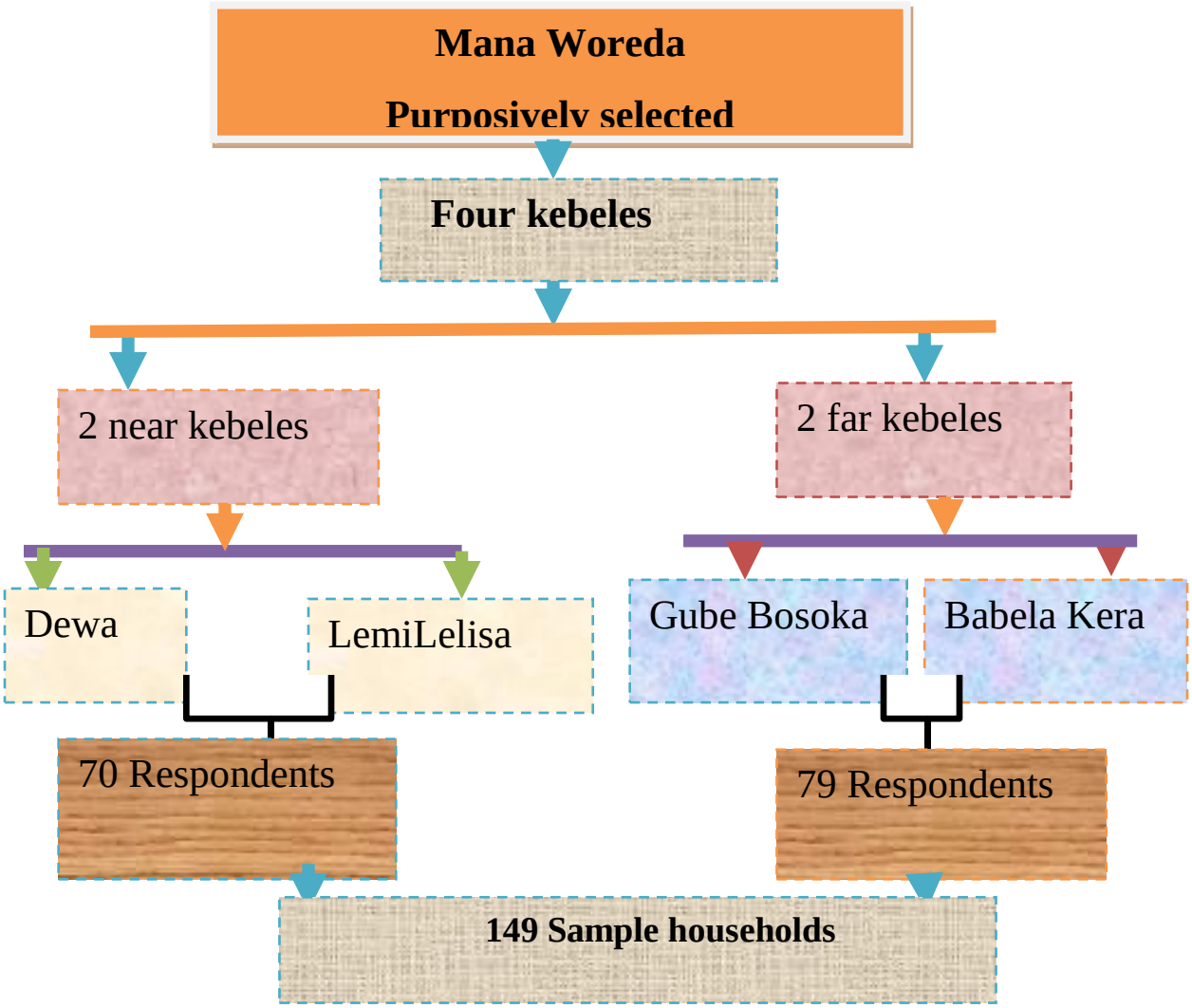


Figure 3: Schematic presentation of sampling design

3.6. Methods of Data Analysis

In order to analyze, summarize and present the data to be collected from primary and secondary data descriptive, regression model and inferential statistical tools were used.

3.6.1. Descriptive statistics

To address the objectives of the study, quantitative data collected was analyzed through simple descriptive statistics such as, frequencies, percentages, mean, and standard deviation. Moreover, an appropriate statistical technique was employed to compare households saving status with independent variables. Qualitative data will also be analyzed through narration and explanation of words. Moreover, SPSS (Version 20) was use d as analytical tool.

3.6.2. Econometric model specification

The Binary logistic regression model was applied for independent which show or identifying a significant factor affecting rural households saving habit. This is due to it provides results which can easily be interpreted and simply to analyzing the data.

Again, it was a proper model when the dependent variable is a dummy one consisting of two, 0 and 1, or more levels (Tathdil, 2002).

Dummy variables are a way of adding the values of a nominal or ordinal variable in a regression equation. The standard approach to modeling categorical variables is to include the categorical variables in the regression equation by converting each level of each categorical variable into a variable of its own, usually coded 0 or 1.

Thus, logistic regression model that is employed in this study was a binary logistic regression model, where the dependent variable is Y and independent one is X. In order to make clear the model, the following logistic distribution function will be used (Maddala, 1986; Greene, 1993; and Gujarati, 1995).

$$Pi=\in(Y=1/Xi)= \frac{1}{1+e-(\beta 1+\beta 2Xi)} \quad \ldots\ldots (1)$$

In the logistic distribution equation, *Pi* is the independent variable; *X*i is the data that is the possibility of a preference of an individual (option of having 1 and 0 values). When β 1+β2*Xi* in Equation 1 is replaced by *Zi*, Equation 2 is obtained:

$$Pi= \frac{1}{1+e-Zi} \quad \ldots\ldots (2)$$

$Z\,i$ is between - ∞ and + ∞, and $P\,i$ is between 1 and 0. When $P\,i$ show the possibility of savers, the possibility of non-savers of rural households is 1- $P\,i$. Then, the possibility of non-saver can be explained as in Equation 3 as follows:

$$1-Pi = \frac{1}{1+eZi} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (3)$$

Equation 4 is obtained by dividing the savers by non-savers:

$$\frac{Pi}{1-Pi} = \frac{1+eZi}{1+e-Zi} = eZi \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (4)$$

When the natural logarithm of both sides of the equation is written, Equation 1 is obtained:

$$Li=\ln\left[\frac{Pi}{1-Pi}\right]=\beta 1+\beta 2 \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (5$$

Thus, the non-linear logistic regression model is liberalized based on both its parameters and variables. "L" is called "logit" and models such as this called "logit models" (Gujarati, 1995, 2003). In these situations, Equation 1 is used for proper transformations:

$$Pi=\in(Y=1\,|\,Xi) = \frac{1}{1+e-(\beta 1+\beta 2X1+\beta 3X2+\cdots+\beta kXk)} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (6)$$

Odds and odds ratio are significant terms in the logit model. Odds are defined as the ratio of the number of events that occurred to the number of events that did not occur. "Odds ratio" on the other hand, is the ratio of two odds, in other words, the ratio of likelihood to another. In Equation 4, two probabilities, savers and non-savers probability of an event is proportioned and this is the odds of proportion. It is important to understand that possibility, odds, and logit concepts, are three different ways of explaining the same thing (Menard, 2002).

$$Zi=\beta o+\varepsilon\beta iX+Ui \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (7)$$

Therefore, the above Binary logit econometric model was used for the study to identify major factors affecting rural household savings.

3.7. Pre-test

Pre-testing was conducted to test the reliability and validity of the questionnaire. After designing the questionnaire, a pre- testing of this instrument was carried out on rural households of the sample units. The researcher did a pre test with 10 % of respondents before distributing the questionnaire. The researcher was used 15 respondents in the pilot process. The purpose is to ensure that those items in the questionnaire were clearly stated and had the same meaning for all respondents. At the same time helped determine how much time was require to administer the questionnaire. Respondents for pre-testing did not a part of the sample.

3.8. Reliability Analysis

Testing goodness of data is testing the reliability and validity of the measures According to (Mugenda, 2008) reliability is the extent to which research findings would be the same if the research were to be repeated at a later date, or with a different sample of subjects. The reliability of a measure indicates the extent to which the measure is without bias (error free) and hence offers consistent measurement across time and across the various items in the instrument. The rule of thumb which is commonly used for describing internal consistency by using SPSS statistical tool of version (20), it is acceptable if the nearer coefficient result of Cronbach's alpha is greater than 0.7. As indicated in the table below, the cronbach's Alpha result shows that all the dimensions were reliable as their reliability values exceeded the prescribed threshold of **0.7**.

Therefore, the SPSS result of cronbach alpha result indicated that all measures are internally consistent.

Table 2: Reliability - Cronbach's Alpha Coefficient

Independent variables (dimensions)	Cronbach's Alpha	Number of Items
Demographic factors on Households saving habit	.740	6
Socio-Economic factors on Households saving status	.812	4
Institutional factors on Households saving status	.985	5

Source; SPSS Computation, 2017

3.9. Ethical considerations for respondents

The researcher has made every effort to avoid unnecessary biases and ensures the objective analysis and interpretation of the collected data. Therefore, the researcher had given due respected to the rights, religion, needs, values and desires of the respondents in the course of conducting this study. Moreover, the researcher assured that the information obtained from the respondents was used for research purpose only. Finally, anonymity and confidentiality of the respondents were respected.

3.10. Definitions of variables and Hypotheses

After the analytical procedures were a clearly defined, it is necessary to identify the potential explanatory variables that would influence household savings habit in the study area.

3.13.1 Dependent Variable

The dependent variable is households saving status, which is measured as a binary variable where 1 indicates having positive saving, and 0 indicates no saving.

Households saving habit: This is dummy variable in the model, which takes a value 1 if the households had saving habit and 0, otherwise. It expected that this dummy variable to have positive impact on rural households saving habit.

3.13.2. Independent Variables

Based on theories of savings and previous studies, various explanatory variables were identified and included in the model. The variables include; demographic (education level, sex, age, marital status, family size, religion), socio-economic (annual income, annual expenditure, distance to the nearest market), institutional (distance from financial institutions, access to information, access to credit and training) and variables related to saving institutions (transactional costs and interest rate).

1. **Age (AGE):** it is the number of years from the birth of the head of the household. It is a continuous variable. According to Rehman*et al.* (2010) found that age has a positive relationship with household savings. The life-cycle hypothesis suggests that there exists a relationship between age and saving rates. When the age of the households increases their saving status going decreases. Therefore, the expected effect of age on rural households saving was negative.
2. **Education level (EDUL):** Education is considered as a main determinant of earnings and savings as well. It is a dummy variable that took a value of 1 if the education level of head of household was secondary and above and 0 otherwise. Kulikov*et al.* (2007) found that education as a human wealth promotes rural household saving. Households with heads who had completed secondary education and above were expected to have higher levels of savings.. It can have a positive influence on household savings. Kulikov*et al.* (2007) found that education as a human wealth promotes rural household saving. It was expected, therefore, households who are literate, have a higher probability of saving it had a positive effect for literate households.
3. **Family Size of the household (FAMSIZE):** this is a continuous variable which, measured by the number of people in the household. Rehman*et al.* (2010) found that family size significantly and inversely affecting household saving. The expected effect of family size on rural household saving was negative for households who have large family size. If a household had a higher number of people or family, it was expected to save less and vice versa.
4. **Marital status of the household head (MRS):** This refers to the marital status of the household head.

It is a dummy variable, which takes the value 1 if the household head is married and 0 otherwise. Most of the time, unmarried (which includes the never married at all, widowed and widower) households are exposed to unplanned outlays when compared to married household heads. The financial plan of unmarried household heads could be narrow and designed around their self-interest. However, married household heads are more responsible and think about the collective interest of the entire family members (Aron*et al.*, 2013). Hence, the financial plan of married people is likely to be broader. As a result, married household heads are expected to save greater than unmarried household heads. The expected effect of rural household saving on single households was negative.

5. **Sex (SEX)**: This is a dummy and took the value of 1 if head of household was male and zero otherwise. Several studies have shown that sex has an effect on asset accumulation. Gedela (2012) found that male headed households save more than female headed households. The expected effect of sex on female headed households was negative.

   In sub Sahara Africa, women own fewer assets than men (LeBeau*et al*., 2004). In rural SSA, women's ability to accumulate assets is governed by family and community norms, which historically have favored men to the disadvantage of women.

6. **Distance to the nearest market (DNM):** This refers to the physical distance in km between the residence of the household head and the nearest market. It can also be calculated in terms of time it takes for the households to go to the nearest market and back to their home. If the farm household has access to market very close to his/her residence, then he/she can easily sell his/her farm output at a relatively higher price and earn more income as oppose to those who are far from the market. Better access to roads expands output markets in addition, from the fact that as farmers locate far from the market, there is limited access to input and output markets and market information. Moreover, distance to market leads to higher transaction cost which reduces the benefits increase to the households. More importantly, the longer distance from the market likely to discourage the households from participating in market oriented production that increase their income and possible, encourage to save in financial institutions (Essa*et al.*, 2012). The expected effect on saving was negative.
7. **Religion (RELG):** this variable is a dummy variable which takes a value of 1 for Islam, 0 for Christian. Although the relationship between religion and economic development on the macro-level has been explored, it is less clear how the background of religiosity influences

economic attitudes and financial decision-making at the level of the individual or household in the micro-level. Fentahun (2014) identifies religion as determinant factors in the west Amhara regional state has had its share towards the impact of saving on households. The result of this study shows religious affiliation effects on saving behavior and decision to save money or not and compares religiosity in the form of Christian to Islam believers the results show Christians save more than Islam. Therefore, the expected effect of religion on rural household saving was negative for Islam religion followers.

8. **Annual Income (ANINC):** it is a continuous variable which refers to the value of the annual output of the household in terms of the current market price. Saving is generally assumed to come from what is left from consumption. Household income is expected to have a positive relationship with household saving. Abdelkhalek et al. (2009) and (Bersales and Mapa, 2006) indicated that income strongly affects the saving level of the household. The expected effect of this variable on rural household saving was positive.
9. **Annual expenditure (ANEXP):** it is a continues variables which it refers to outlays (in the ETB) on social celebrations such as annual holidays like New Year, *Meskel* ,Christ Mass, Easter, Mauled, Eid–ul-Adah, wedding and the like. Therefore, the more the households spend, they're saving reduces. Rehman et al. (2010) indicated that expenditure significantly and inversely affecting household saving. The expected effect of expenditure on rural household saving was negative.
10. **Distance to the nearest financial institutions (DISTFIN) /DNFI/**: it refers to the physical distance in km between the residence of the household head and the nearest formal financial institution. Households near to financial institutions have a location advantage and can contact easily and have more access to information than those who live more distant locations. As this distances increase, the household head is expected to get discouraged, especially when the amount to save is small. Chemonics International (2007) identified distance remains a major barrier to formal financial saving and other markets in rural areas. As rural households far from formal financial institutions, the expected effect on saving was negative.
11. **Access to credit service (ACCRT):** Access to credit services is a dummy variable measured as 1 if the household has access to credit services and 0 otherwise. If the household has access to credit services for input purchase, investment, consumption and other activities, then the household is not expected to save for the activities. Some financial institutions like Harbu

MFIs, Oromia saving and Credit Share Company and saving and Credit Cooperatives put saving as the primary principle for credit access from their institution.

Therefore, this principle helps the rural households to improve their saving status. Households with better access to credit have higher tendency to save more than that of households who do not access to credit service. Empirical studies revealed that savings of rural household increases with the amount of credit received (Desta, 2004). Therefore, the amount of credit received was expected to have a positive relationship with household saving.

12. **Access to Training or Awareness and motivation creation (LTAMC):** This is dummy variable in the model, which takes a value 1 if the households took training/ get awareness about savings/ and 0, if the households do not get any training. This refers to any extension services provided by government and non-government organizations in the area. Hence, extension participation will hypothesize to positively influence households saving habit.
13. **Access to information (ACI):** It is a dummy variable that takes the value 1 if the farm household has access to information and 0 otherwise. This refers to data, statistics, facts and figures that the farm households obtain through education and promotions, television, radio, newspapers and other media for increasing saving. Currently, the government of Ethiopia is using media like radio, television and newspapers to promote saving the country and for the development of saving culture. Those farm households who have access to such information are expected to save more as compared to those farm households who are less accessible. Hence, accessibility to information is expected to positively affect household saving. Girma*et al.* (2014) found that access to information positively and significantly affects the decision of households to use financial savings.
14. **Interest rate (IR)**: It is the perception about the rates of interest paid on savings by financial institutions. It was a dummy that took the value of 1 if the rate was perceived as being high and zero otherwise. Households who perceived the interest rate on savings to be higher were expected to save more compared to those who perceived it as being low. Mahlo (2011) estimated the relationship between household savings and interest rate in South Africa and his result showed that there was a positive relationship but Simleit et al. (2011) found a negative effect on rural household savings. In most cases the interest rate obtained from saving discourages savers and it was expected interest rate had a negative effect on rural households' savings.

15. **Transactional costs (TC):** Transactional costs are costs that cover a wide range of informational cost, transportation costs, and consumption costs. It is a continuous variable which is measured in Birr that the savers spent money during they deposit money in formal financial institutions at a time. When the transaction cost is high, rural households saving will be reduced. (Sebhatu, 2012) indicated that as financial institutions are far to the households' house, they would have been spent more resources (time, labour, money) to access financial products and services. The other one is an increase in transport cost was expected to decrease the probability of saving in financial institutions and increase the probability of households saving .Therefore, the expected effect of this variable on rural household saving was negative.

Table 3 : Definition and codes of variables in the study

Variables code	Variable Type	Expected sign(+/-)	Variable Definition
MARSTT	Dummy	+ve	Married 1, other 0
RELGN	Dummy	-ve	
SEX	Dummy	-ve	Male 1,female 0
EDUCTN	Dummy	+ve	Literate 1 illiterate 0
FAMSZE	Continues	-ve	
AGE	Continues	-ve	
DSTMRKT	Continues	-ve	Near 1, far 0
ANUINC	Continues	+ve	
AEXPNSE	Continues	-ve	
DSTNFFIS	Continues	-ve	Near 1, far 0
ACCTCRDT	Dummy	-ve	Have access 1, have no access 0
ACCSTRNG	Dummy	+ve	Have access 1
ACCSINFN	Dummy	+ve	Have access 1
TC	Continues	-ve	Cost incurred 1, o otherwise
IR	Dummy	-ve	

CHAPTER FOUR

4. DATA ANALYSIS AND RESULT INTERPRETATION

This chapter presents the main findings of the study. The first section discusses the descriptive statistics, results by using percentages, frequency distribution, mean and standard deviation and the second section deliberates the results of the econometric models of Binary logit was applied using SPSS version 20 to identify major factors affecting rural households' savings habit and to see the association between the dependent and independent variables.

4.1. Descriptive Statistics Analysis

This section was mainly concerned with the descriptive analysis results of the survey data and interpretations of the analytical findings. Descriptive statistics were used to summarize the data by using frequency distribution, percentages, and for continues variables (mean and standard deviation) as well as inferential statistical tests like chi-square and t-tests were employed to see association between the dependent and independent variables. Thus, chi-square test was employed for dummy independent variables whereas t-test was employed for continue independent variables.

4.1.1. Characteristics of Respondents by Socio-Demographic factors

Table 4.1, below was presented sample household heads in the study area classified by sex, age, education, marital status, family size and religion of the households head.

Sex of households head

As presented in table 4.1 below, out of the sampled household heads 113 (75.8%) were male headed households and the remaining 36 (24.20%) were female headed households.

Cross tabulation of surveyed sample indicate that 76.7% and 73.9% were non-saver and savers of male headed household's whereas 23.3% and 26.1% were non-saver and savers of female headed respondents, respectively. The result revealed that male households headed of both saver and non-saver had greater percentage than headed households of female savers.

The chi- square value (x2 =0.135; P=0.714) showed that there was no statistically significant association between saving status and sex of households head.

This study result was in line with expected hypothesis and Gedela (2012) his finding no positive association among sex and households saving status.

From this result, it can possible to conclude that being male or female headed household had no statistically significant effect on saving decision of the households.

Education of household's head

Of the total sampled household heads, 102 (68.5% of the respondents were illiterate (have 0 level of education), 47(31.5%) respondents were literate (table 4.1 below).

Cross tabulation of surveyed sample indicate that from those savers 33 (71.7%) were literate and the remaining 13(28.2%) were illiterate households headed respondents. The results showed that majority of the saver respondents were literate households head.

According the chi-square value (x2=49.789; p= 0.000) of the sampled households indicated that there was statistically significant association between the education levels of households and saving habit. It implies that rural households who are literate have a higher probability of saving their money due to they have the ability to access information and skills.

This study result was in line with the expected hypothesis and the finding of Girma *et al.* (2014) that showed positive and statistically significant effect on rural households' savings. But it is contrary to (Lusardi, 2008:1)", Hussien *et al.* (2007) they found that with increased education of household heads, household saving was reduced.

Hence, it can possible to conclude that education can help to improve the effectiveness of saving among rural households headed and more educated rural households were more likely to save their money in formal financial institutions.

Marital status of households head

Table below indicates that, from the total sampled households head, 116 (77.9%), 16 (10.7%), 17 (11.4%) respondents were married, divorced and widowed respectively. Among the sampled households headed 80, 12 and 11 were married, divorced and widowed respondents were non-savers respectively. But for the purpose of analysis, it was re-coded as married and unmarried (single, divorced and widowed).

Out of savers households head, the proportion of married and non-married respondents were 78.3% and 21.7% respectively. The table result implies that most of the time, unmarried (which includes the never married at all, widowed and widower) households are exposed to unplanned expenses when compared to married household heads. But as the chi-square test result indicated that there had no statistically significant association between marital status and saving status of the households (x2 =0 .416; P =0 .812). Therefore, the result showed that being married or unmarried had no significant effect on rural households' savings. This finding was contrary with the finding of (Aron et al., 2013) and with the expected hypothesis.

Based on this it can possible to conclude that married and unmarried household heads would have similar socio - cultural background regarding to rural households' savings.

Religion of households head

Surveyed result demonstrated that, 136(91.3%) of the sampled households headed belongs to Islam and the remaining 13(8.7 %) were belongs to Christians (table 4.1 below).

About non-savers (103) of Islam and Christian follower's respondents were 91.3% and 8.7% respectively. It implies that the percentage of Islam follower of non-savers was greater than Christian followers. The chi-square value result of the sampled households indicated that there was statistically significant association between religion and saving status of households(x2 =6.801; p= 0.009). This result was agreed with the prior findings by Fentahun (2014) but it is contrary with the expected hypothesis.

Hence, it can possible to conclude that religious association effects on saving behavior and decision to save money or not in study area.

Table 4.1: Demographic characteristics of sampled households head

Variables	Category	Frequency	Percentage	chi-square (X^2)	p-value
Sex of households	Male	113	75.8	0.135	0.714
	Female	36	24.2		
	Total	149	100.0		
Religion	Christen	13	8.7	6.801	0.009
	Islam	136	91.3		
	Total	149	100.0		
Education	Illiterate	102	68.5	49.789	0.000
	Illiterate	47	31.5		
	Total	149	100.0		
Marital status	Un married	33	22.1	0.416	0.812
	married	116	77.9		
	Total	149	100.0		

Source: Own field survey data, 2017 P-value=significant at 1%

Family size of households head

As indicated in table below, among the total sampled households respondents 55(36.9%) of them have 1 to 5, 74 (49.7%) have 6 to 10 and 20(13.4%) of them have above 10 family size. It indicated that the majority of households' respondents have the family size of 6 to 10 were (49.7%). On the other hand among savers households head 54.3% of respondents have a dependent or family size were 6 to10 in numbers. The t- value indicated that there was no statistically significant mean difference between the mean family size of households and saving status (t-value=0.226; p=0.635). This result was in line with the hypotheses and with the previous finding by Rehman*et al.* (2010) he found that family size inversely affecting households saving.

Based on the result, it can possible to conclude that the variation of family size of the households had not showed a larger difference and the result indicated that there had no significant effect on rural households saving.

Age of households head

According to table below, it indicated that the age of sampled households headed, 35 (23.5%) were between the age category of 20 to 30 years, 46.3% were between 31-40 years, 22.1% were between 41to 50 and the remaining above 50 years were 8.1% with a mean score of 2.67 and a standard deviation of 1.205.

Cross tabulation of surveyed sample indicate that from savers, those found within the age category of 20-30 were 13, between 31-40 were 20, between 41-50 were 8 and above the age of 50 (5) were savers respectively. The table result showed that household's head found in the age category of 31-40 were more savers than other aging groups. The t-value (t=.133; P=0.553) showed that there was no statistically significant difference between the mean age of savers and non-savers households with respect to their age. The result in this study showed that it had no a significant effect on rural households' savings. This study results consistent with the hypothesized and the finding of Chakrabarty.et al (2008) but it contrary with the previous finding of Rehman et al. (2010) he found that age has a positive relationship with household savings.

The possible explanation here was as the mean age of households were relatively the same and these households would have relatively similar life experience regarding to saving.

Table 4.2: Demographic characteristics of sampled households head by Age and Family size

Variables	Category	N	Percent	t-value	p-value
Age of households	20-30	35	23.5	0.133	0.553
	31-40	69	46.3		
	41-50	33	22.1		
	Above 51	12	8.1		
	Total	149	100.0		
Family size of households	1 to 5	55	36.9	0.226	0.635
	6 to10	74	49.7		
	Above 10	20	13.4		
	Total	149	100.0		

Source: Own field survey data, 2017

4.2. Saving Habit of the Respondents

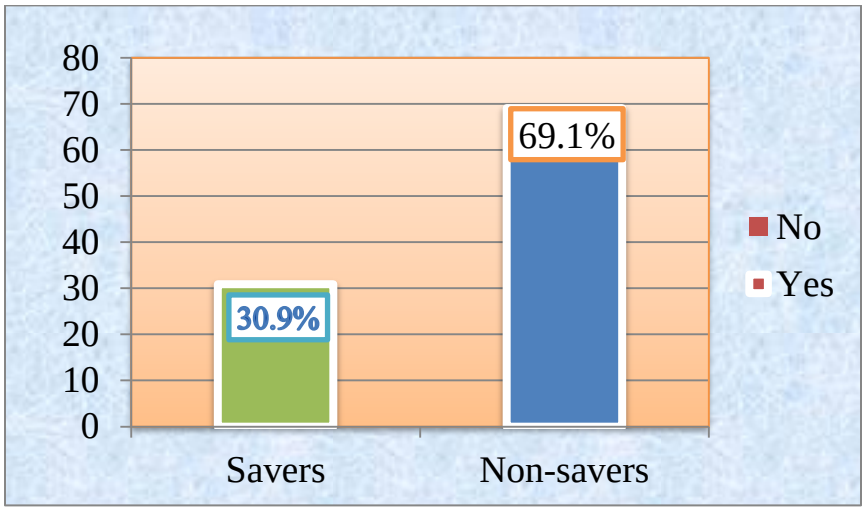


Figure 4.1: proportion of savers and non-savers

Source: Own field survey data, 2017

The figure above demonstrates that, among the sample respondents 46 (30.9%) were saving money while the remaining 103 (69.1%) were not save their money in formal financial institutions. This result indicates that the number of households save at formal institutions were too small.

The result of the focus group discussion held with staff members of HARBU and OCSSCO MFIs showed that the institution has started awareness creation through provide informal training and started rewarding for saver households. This encouraged and improved the willingness of rural households to save their money in formal financial institutions. During the focus group discussion period from the members Harbu MFI, he said that my friend had got a tool used for digging (farming materials) like pickaxe as a reward since he has saved his money and old customer with Harbu MFI.

Therefore, it can possible to conclude that there is low level of awareness towards saving in rural households in the study area.

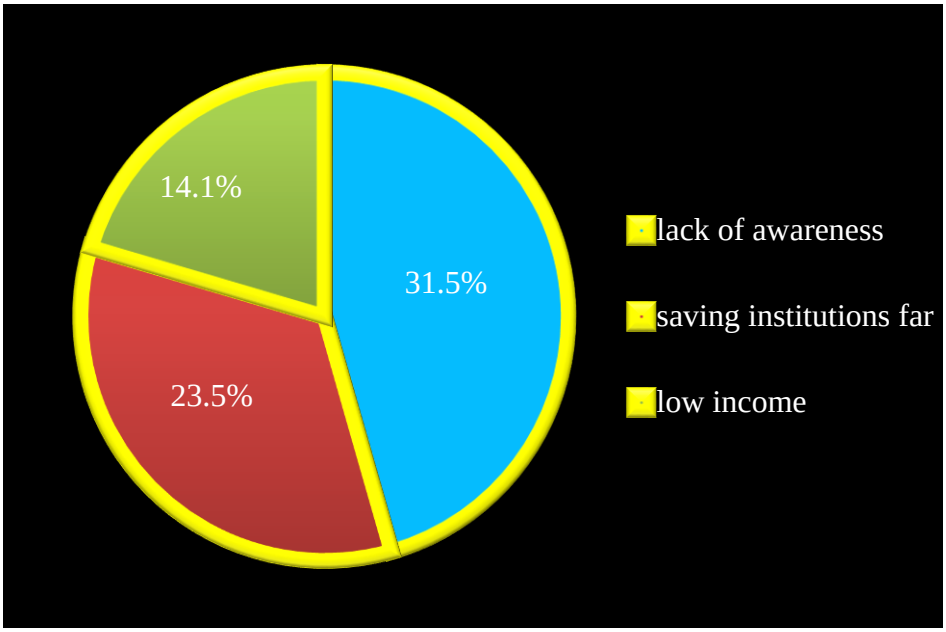


Figure 4.2: Reasons for not saving among sample households head
Source: Own field survey data, 2017

Figure 4.2 above showed that, the reasons of no -saving among sampled households in study area. Out of the sampled households headed the cross tabulation revealed that, 103(69.10%) had no saving habit due to different reasons. They gave the following reasons for no saving; 47 (31.5%) of the respondents were not aware about saving, 21 (14.1%) were did not save due to low income, and the remaining 35(23.5%) did not save due to the saving institutions were far. The result indicated that the long traveled distance of financial institutions and lack of awareness at rural areas discourage households to save their money.

The result of focus group discussion regarding on the reason of households was not saving. The result indicated that rural households did not want to save in formal institutions. This was because they perceived as once the deposited money cannot be withdrawn any time rather than a year. It was also the result indicated that, rural households are unaware that savings can be effected with even small amount of money. Some of them also believed that saving are for the rich people and they assumed that money is saved if there is only access income.

Hence, it can conclude that lack of financial institutions at a reasonable distance from the villages of rural households and lack of awareness were the reasons for no saving in the study area.

4.3. Characteristics of Households Head by Institutional factors

Access to Credit service for households head

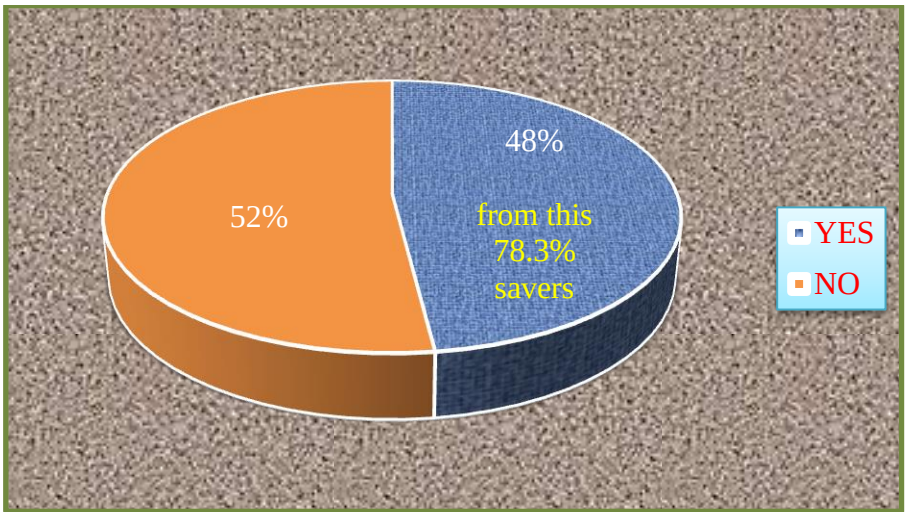


Figure 4.3: Respondents get credit service previously or not
Source: o Own field survey data, 2017

As presented at figure 4.3 above, out of sampled households head 72 (48.3%) of them have get access to credit service whereas the remaining 77 (51.7%) had not get credit service previously. On other hand, the cross tabulation of surveyed sample indicate that from savers, 78.3% were sampled households those who get credit service previously and 21.7% were not. It implies that, the majority of sampled households who had credit access were saving higher. Based on the Chi-square value (x2 =9.14; p= 0.002) result indicated that there was statistically significant association between credit access and saving status of sampled households. The implication was that households who had more access to credit had higher probability to save their money in formal financial institutions as well as credit users would have more information and awareness regarding to saving in financial institutions than non- credit users. This output was in line with the hypothesized and with (Desta, 2004) finding. He found that savings of rural household increases with access to credit service or obtained.

Hence, it can possible to conclude that households with better access to credit have higher tendency to save their money more than that of households who do not access to credit service. Because, households who had credit services were enabling household to expand their income earning option.

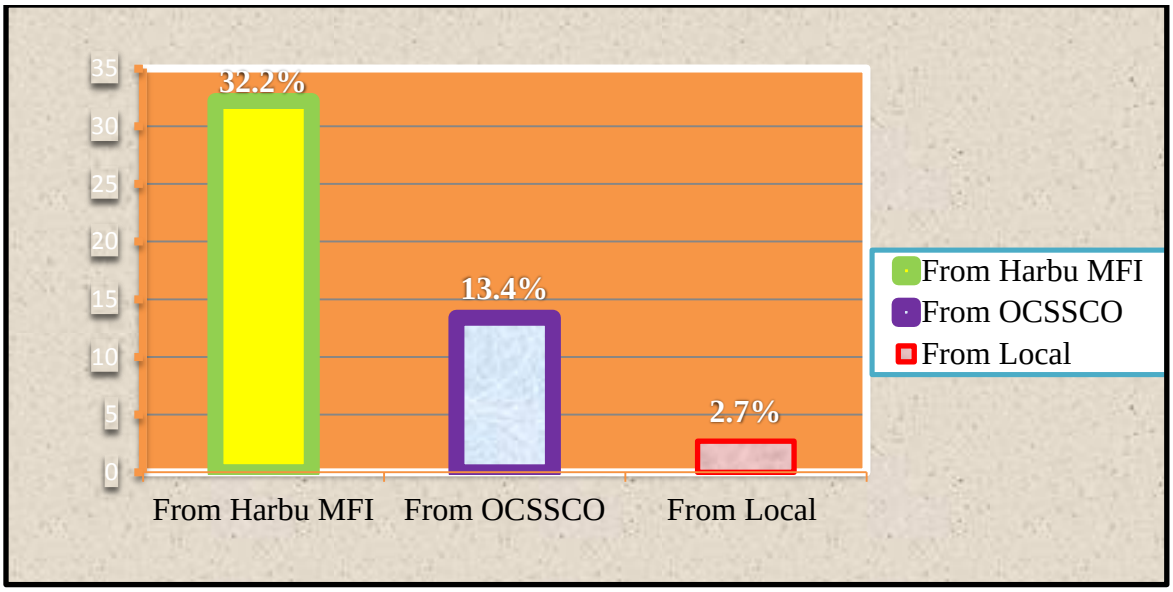


Figure 4.4: Sources of credit service for respondents
Source: Own field survey data, 2017

The above figure revealed that, the sources of credit for those respondents who have get credit service were from HMFI, OCSSCO and from local or informal one were, 48 (32.2%), 20 (13.4%) and 4 (2.7%) respectively. It indicated that more percentage of the credit source for credit servers was obtained from HMFI.

This requires more effort from the appropriate regulatory and guarantee provisions that would encourage the formation of such institutions and ensure confidence in them in the long term.

From this result it can possible to conclude that in the study area even if the micro-finance institutions were access in number but still now rural households were not obtained access of financial or credit services. So, concerned sectors need to facilitate appropriate strategies of credit access in place.

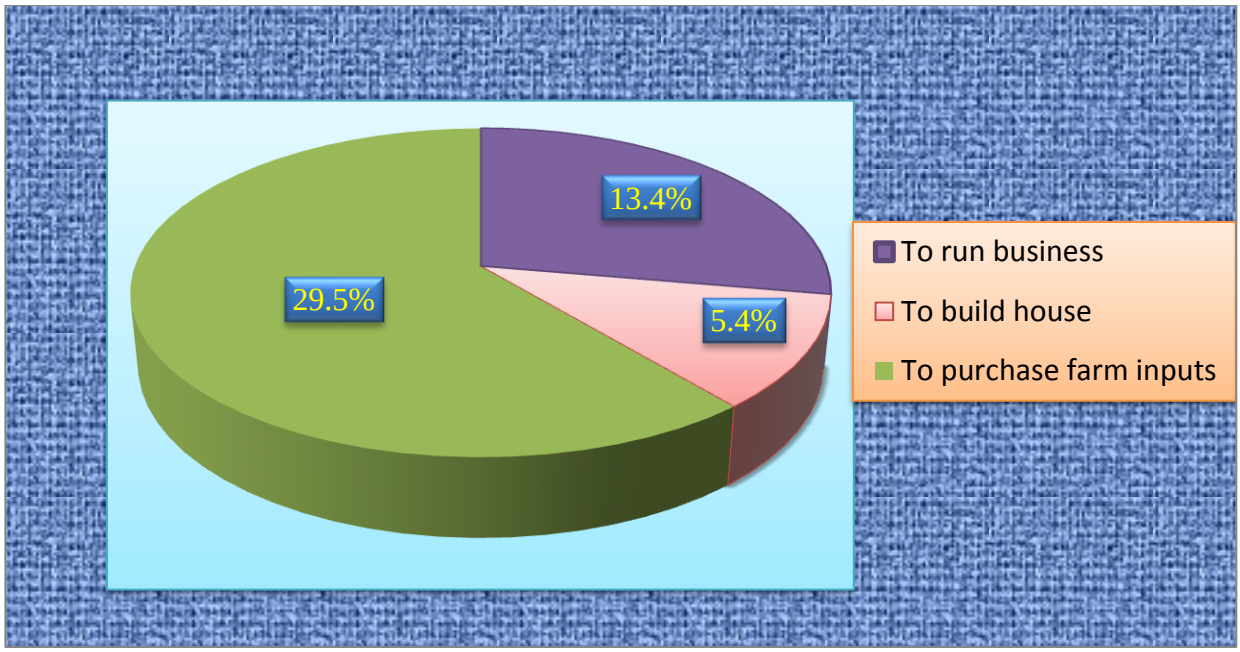


Figure 4.5: purpose of credit service
Source: Own field survey data, 2017

According to showed at figure above, the primary purpose of respondents who have taken the credit service 27.8% ,11.11% ,61.11% were to run business, to build house and to purchase farm inputs (Ox, fertilizer & improved seeds) respectively. The results revealed that, the majority of the sampled households taken credit to purchase agricultural inputs.

Hence, it concluded that credit service providers were helping farmers to be more liquid as it is serving them as a source of capital as well as enable to generate their income and improve their saving habit.

Access to Training for households head

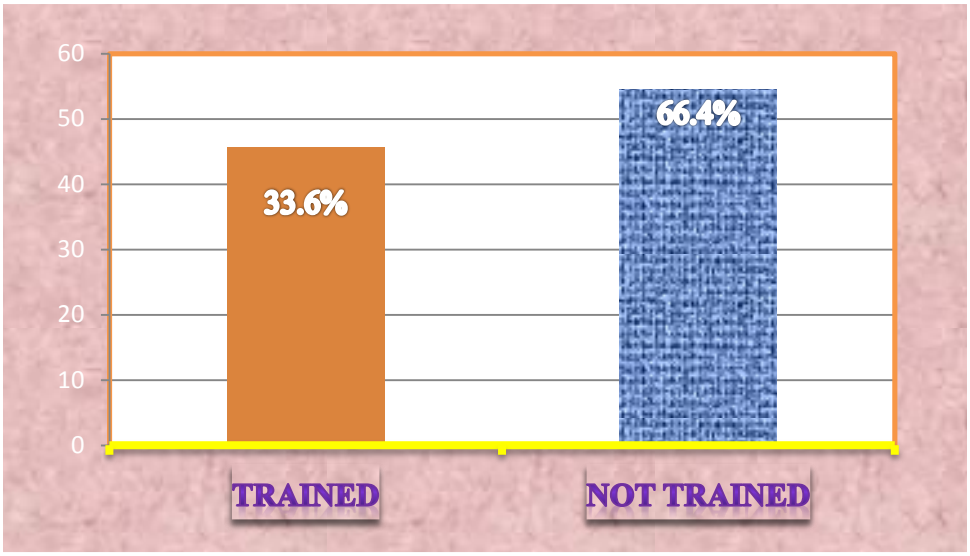


Figure 4.6: Sample households trained or not about saving
Source: Own field survey data, 2017

This figure showed the respondents were trained regarding on saving or not. As presented at figure above, from total of 149 sampled households 50 (33.6%) have an access to training about saving, where as 99 (66.4%) have no access or not received training about households saving culture. The cross tabulation of sampled revealed that, out of saver households head 93.5% were those who had access training about saving and the remaining 6.5% were not received training. The results indicated that more trained households were save more their money than untrained households. The chi-square value of the sampled households indicated that there was statistically significant association between access to training and saving status of households in study area (x2 =28.546; p= 0.000). It implies that access to training enhances households to motivate and improve their saving awareness in study area. This result was similar with expected hypothesized and with the finding of Girma *et al.* (2013), he found that participating household heads on trainings were positively affects their saving.

Therefore it can possible to conclude that awareness creation through training is one way of improving the skill deficit of households , so providing informal education and short term training to the rural households enhanced them well to improve their savings culture.

Access to information for households head

Surveyed result of the table below shows that, among sampled households head 105 (70.5%) were obtained access information regarding saving whereas 44 (29.5%) were had not get enough information about saving. On the other hand, among savers households' 76.10% respondents were obtained enough information from formal institution (MFIs, banks and cooperative unions) and from informal (mass media and friends) whereas 23.9% respondents were not have access information about households savings habit. The chi-square value of the sampled households indicated that there was no statistically significant association between information and saving status of the households (x2 =1.009; p= 0.315). The result is contrary with hypothesized and with the finding of Girma *et al.* (2014) found that access to information positively and significantly affects the decision of households to use financial savings. It implies that sampled households who had got information regarding saving from different agents were not as such significant.

Based on the result it can possible to conclude that households who had equal access to information had no effect to make rural households saving decisions and it failed to incorporate and address saving issues.

Table 4. 3: Households get Access to information about saving

Variable	Frequency	Percent	X^2	p-value
YES	105	70.5	1.009	0.315
NO	44	29.5		
Total	149	100.0		

Source: Own field survey data, 2017

Transactional costs

Table 4.4 below demonstrated that, out of sampled households head 16.8% said that the additional costs were incurred for transportation and consumption cost when they went to save their money in formal institutions, whereas 19.5% were said the transaction cost was not problem. The table result

implies that saver households incurred high transactional costs when they want to deposit their money in financial institutions and this probably discourages their willingness to save as well.

But the t- value result indicated that there was no statistically significant association between households saving status and the transactions costs (t=0.366; P=0.546).

This result was in line with expected hypothesized but it contrary with the finding by (Sebhatu, 2012) he found that there is statistically significant association among transaction costs and households saving.

From this it can possible to conclude that, when additional costs (transaction costs) was incurred, it lead to the probability the saving interest of households were decrease or discouraged.

Table 4.4: Transaction cost affect saving habit

Variable	Frequency	Percent	t-value	p-value
NO	25	16.8		
YES	124	83.2	0.366	0.546
Total	149	100.0		

Source: Own field survey data, 2017

Saving Interest rate

As presented in table 4.5 below, Out of sampled household's head 80 (53.7%) respondents said that the saving interest rate paid were a discouraged them to save in saving institutions whereas 69 (46.3%) were said had no problem. The chi- value result indicated that there was statistically significant association between households saving status and interest rate paid (x2=11.896; P=0.001). This result was in line with the finding of Mahlo (2011) he found that the relationship between household savings and interest rate was a positive. But it contrary with the finding of Simleit *et al.* (2011) found a negative effect on rural household savings with the hypothesized.

According to the focus group discussion result, rural households were not ready to use saving in formal financial institutions, because they not want saving interest rate to be paid on money deposited, so, rely on this basis at current time financial institutions have been changed the system

towards formal saving. Since 2015 there have been institutional reforms by formal financial institutions to enact interest free saving in the financial institutions.

Table 4.5: Respondents Response on saving interest rate

Variable	Frequency	Percent	X2	p-value
No	69	46.3	11.89	0.001
Yes	80	53.7		
Total	149	100.0		

Source: Own field survey data, 2017

4.4. Characteristics of Households Head by Socio -Economic factors

Distance to the nearest financial institutions from households head

Table 4.6 below shows that, out of sampled households headed, 103(69.1%) said that the distance from formal financial institutions were discourage to save their money whereas 46(30.9%) said that the distance had not problem to save money. The average distances (in kilometers) that the rural households traveled to access the nearest formal financial institutions were 15.34km of mean and standard deviation of 6.357 km. The t-value result indicated that the mean distance between households to their nearest formal financial institution was statistically significant (t=27.24; P=0.000). It implies that, households near to financial institutions have a location advantage and can contact easily financial institutions. And also it implies that as distances increases, the household head is expected to get discouraged especial when the amount to save is small. The result was agreed with empirical study of Chemonics International (2007) identified distance remains a major barrier to formal financial saving in rural areas and but inconsistent with the hypothesized of the study.

Hence, it can conclude that household heads residing far away from the financial institution have to incur transportation cost and are actually discouraged to save since there are no savings opportunity closer to them. This reduces their willingness to save.

Table 4.6: Distance from financial institutions

Variable	Frequency	Percent	mean (std)	t-value	p-value
No	46	30.9	15.34	27.244	0.000
Yes	103	69.1	6.357		
Total	149	100.0			

Source: Own field survey data, 2017 P-value=significant at 1%

Distance to the nearest market from households head

Surveyed result shows that at table below, of the total sampled households head, 111(74.5%) said that the longer market distance from households home affects their saving habit where as the remaining 38 (25.5%) were reported as there was no problem of market distance. And the average distances (in km) traveled by households to access market center were 7.59 km of mean and 5.243 km of standard deviation.

The result indicated that in study area households were traveled relatively longer distance to access market center. The t- value revealed that there is statistically significant association between households saving status and the nearest to market center (t=51.374; P=0.000). It implies that the longer distance from the market center more likely to discourage the households from participating in market oriented production that increase their income and the possible encourage to save in financial institutions. This result was agreed with the e finding of (Essa *et al.*, 2012) but it contrary with the expected hypothesized.

Hence, it can possible to conclude that rural households has access to market very close to their residence can easily sell their farm output at a relatively higher prices and earn more income as well as improve their saving capability.

Table 4.7: Market Distance Affect on households saving habit or not

Variable	Frequency	Percent	mean (std)	t-value	p-value
No	38	25.5	7.59		
Yes	111	74.5	5.243	51.374	0.000
Total	149	100.0			

Source: Own field survey data, 2017, P-value=significant at 1%

Annual income of sampled households

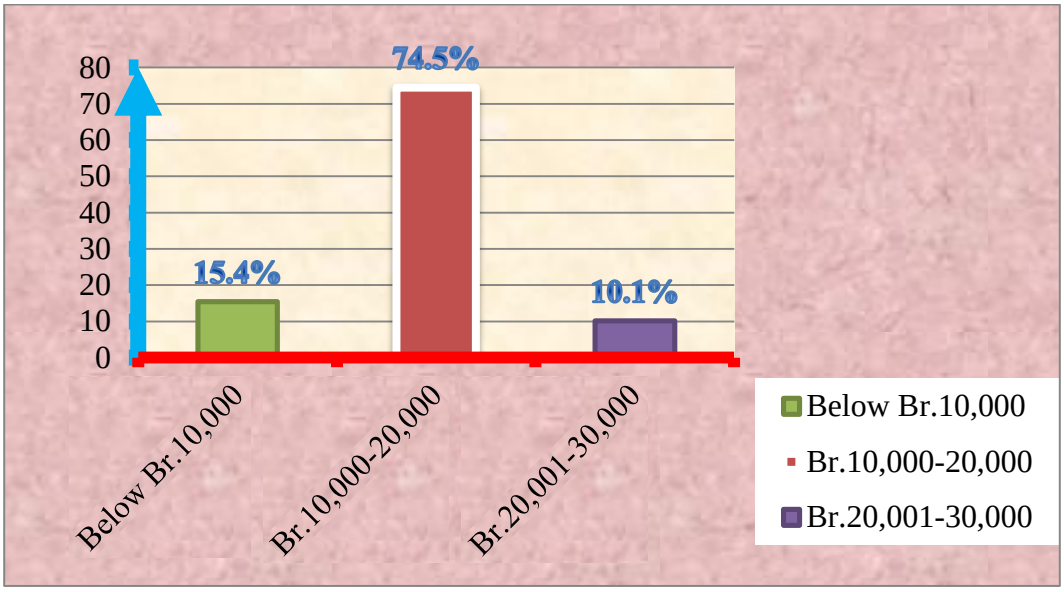


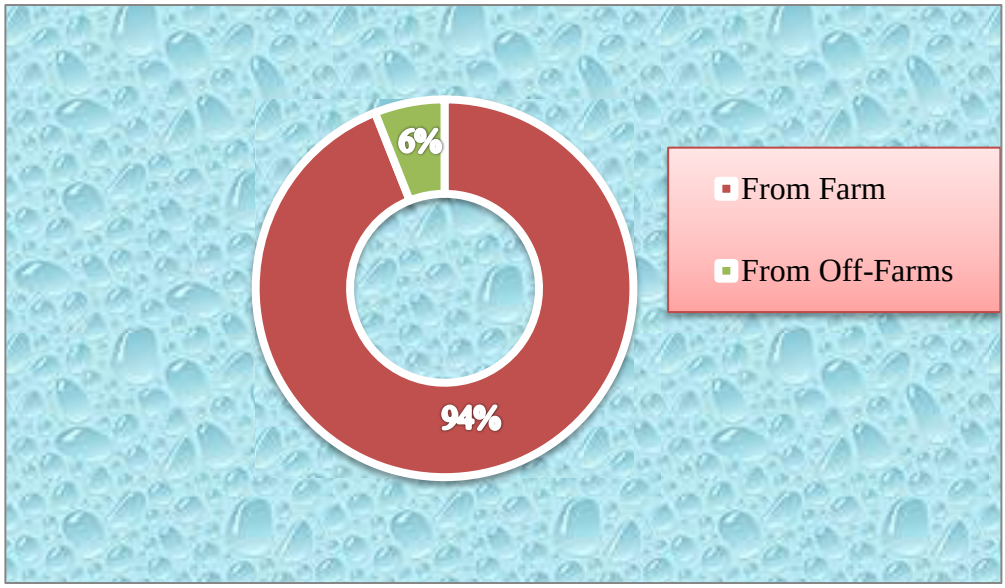
Figure 4. 7: The estimated annual income of the respondents.
Source: Own field survey data, 2017

The figure above showed that, the estimated annual income of both savers and non savers of the sampled household heads, 23 (15.4%) were less than birr 10, 000 birr whereas 111 (74.5 %) and 15 (10.1%) of the respondents were earning their income annually between the category of birr 10,000-20,000 and 20,001-30,000 respectively. The survey result showed that the respondents with annual household gross income categorized within 10,000-20,000 score was the highest among the others and the mean annual income of the household's gross income was 14,261.7450 Birr.

The t-value also showed that, there was statistically significant association between the annual income of households with respect to their saving levels (t=4.811; P=0.030). It implies that higher income leads to higher probability of households to save. This result was consistent with hypothesized and the study by (Aron *et al*., 2013) and Abdelkhalek *et al.* (2009) indicated that income strongly affects the saving level of the households

Hence, it possible concludes that, when the income level of households increased, the saving rate will also increase by some present.

Figure 4.8 :sources of household's annual income



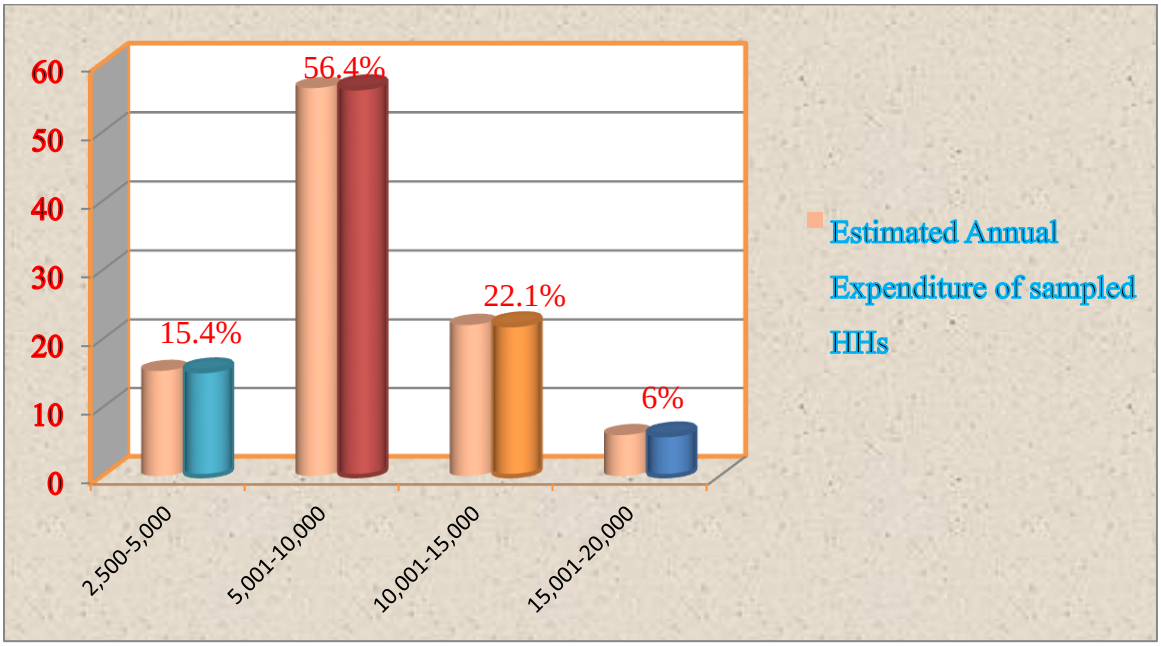
Source: Own field survey data, 2017

Of total sampled households, 140(94.0%) of respondents were earning their annual income from farm activities, whereas the remaining 9(6.0%) were earning from non-farm activities and among others, (94%) respondents were engaged in farm activities. The above result indicates that the primary occupation of the household is agriculture. On the other hand, among savers respondents 68.3% were farms engaged both in farm and non-farm activities whereas 31.7% respondents were those who engaged only farm activities (see figure above 4.8).

Hence it concludes that, households who have engaged in both farm and non-farm activities have become better income as compared to households who have engaged only in farm activities.

Annual expenditures of sampled households

Figure 4.9: The estimated annual expenses of the respondents.



Source: Own field survey data, 2017

Figure above result tried to find out, the sampled households spent their incomes on and the expenditure of the money of the sampled households. The result indicated that a significant number of sampled households spent their income on the housing purposes, school expense and unexpected medical expenses, purchase farm inputs (improved seed & fertilizer).

Out of the total respondents 15.4%, 56.4%, 22.1%, 6% were spent their income annually between birr 2,500-5,000, 5,001-10,000, 10,001-15,000 and 15,001-20,000 respectively. The result revealed that majority of the sampled respondents were spent their income between 10,001-15,000 birr annually. On the other hand, the average and standard deviation of sampled household's annual expenditure were 9,318.7919 and 3,931.51 birr respectively. The t- value showed that there was statistically significant association between the annual expenditure of households and saving status (t=25.006; P=0.000).

The result is similar with the finding of Rehman et al. (2010) indicated that expenditure significantly association with households saving but it was inconsistent with the study hypothesized.

4.5. Econometric Analysis of Factors Affecting Rural households saving Habit

This section discusses multi-collinearity diagnostics and econometric analysis of significant factors filtered for econometric analysis.

4.5.1. Multi-Collinearity Diagnostics

To study determinants of saving habit among rural households in the study area, data gathered from 149 sampled respondents were subjected to Binary regression analysis. The statistical software used for analyzing the data was SPSS version 20. Before running the Binary logit model, both the continuous and categorical explanatory variables were checked for the existence of multi collinearity problem. The existence of multi-collinearity might cause the estimated regression output to have the wrong signs and smaller odds ratios which lead to wrong conclusion.

To test the presence or existence of multi-collinearity, the technique of variance inflation factor (VIF) for association among the continuous explanatory variables and Contingency Coefficient for dummy variables was employed to detect the problem of multi-collinearity (Gujirati, 2003).

$$VIF\ (xi) = \frac{1}{1-Ri^2}$$

Where, $\mathbf{Ri^2}$ is square of multiple correlation coefficients that results when one explanatory variable (x*i*) is regressed against all other explanatory variables. The larger value of *VIF (xi)* the more difficult or multi-collinear the variable xi is. As a rule of thumb, if the *VIF* of a variable exceeds 10, there is a multi-co linearity problem.

In table below 4.8, the VIF values displayed have shown that all the continuous explanatory variables have no multi-collinearity problem.

Table 4.8: Variance Inflation Factor (VIF) for Continuous Variable

S.No	Variables	Ri^2	VIF
1	**AGE**	0.949	1.054
2	**FMSZE**	0.968	1.033
3	**DISTFIN**	0.734	1.362
4	**DISTMKT**	0.715	1.399
5	**ANICME**	0.845	1.183
6	**ANEXP**	0.837	1.195
7	**TC**	0.806	1.240

Source: Own field survey data, 2017

Similarly, contingency coefficients were computed to check the existence of multi-collinearity problem among the discrete explanatory variables. The contingency coefficient is computed as:

$$C = \sqrt{\frac{X^2}{|N+X^2}}$$

Where,

CC = Contingency Coefficient, $\chi 2$ = Chi-square random variable and N= total sample size.

The decision rule for contingency coefficient is that when its value approaches 1 (Gujirati, 2003), there is a problem of association between the discrete variables. The contingency coefficients result implied that there was no multi-collinearity problem among the explanatory dummy variables (Table 4.9).

Table 4.9: Contingency coefficients (CC) for dummy/ discrete variables

Variables	Sex	RLGN	EDUCTN	MARTSTS	TRNING	ACCRDT	ACCINFN	IR
Sex	1							
RLGN	0.560	1						
EDUCTN	.666	1.04	1					
MARTSTS	.000	.012	.653	1				
TRNING	.079	.587	.107	.506	1			
ACCRDT	.078	.456	.246	.452	.000	1		
ACCINFN	.001	.618	.734	.675	.001	.001	1	
IR	.600	.791	.003	.545	.247	.382	.559	1

Source: Own field survey data, 2017

4.5.2. Binary logit Regression Analysis

In the preceding section, variables characterizing rural households saving habit in the study area and their difference among yes or no of perception were identified.

However, in binary analysis, emphasis is on analyzing these variables together, not one at a time. By considering variables simultaneously, it's possible to incorporate important information about their relationship. The results are reported using odd ratios. Each odds ratio shows the effects of marginal change in the corresponding dependent variable specifically, on the level of households saving in the study area. An odds ration greater than one (>1) indicate a positive relationship between the independent variable and the dependent variable; higher saving of households, it associated with an increase in the values of independent variable or it would mean that for a unit change in the independent variable there would be a corresponding change in the Odds ratio and negative odds ratios suggest the converse.

Accordingly, the estimation of parameters of the independent variables expected to influence rural households saving are displayed in table 4.10. Out of fifteen explanatory variables, only six of them were found to be significantly influencing rural households saving habit in the study area.

Table 4.10: Maximum likelihood estimates of the Binary logit model

Variables	B	S.E.	Wald	Sig. (P-value)	COR	95% C.I.for EXP(B)	
						Lower	Upper
DISTFIN	3.499	1.001	12.218	.000**	5.395	2.522	11.540
ACCRDT	3.146	1.626	3.742	.053**	6.700	2.983	15.050
TRNING	1.058	1.640	.416	.019**	7.987	3.534	18.054
ACCINFN	.327	1.034	.100	.752	1.387	.183	10.533
DISTMKT	3.498	1.071	1.366	.002**	11.885	5.042	28.019
TC	1.252	1.386	9.092	.243	3.498	.428	28.560
IR	1.654	.911	3.292	.700	5.226	.876	31.191
ANICME	-.860	.891	.930	.335	.423	.074	2.429
ANEXP	1.878	.818	5.275	.022**	5.553	2.617	11.781
EDUCTN	4.413	.970	20.702	.000**	16.137	6.869	37.910
FAMSZE	.139	.269	.267	.605	1.149	.679	1.945
MRSTS	.018	.308	.003	.953	1.018	.556	1.864
AGE	-.073	.211	.120	.729	.930	.615	1.405
SEX	.175	.468	.140	.709	1.191	.476	2.981
RLGN	.219	.644	.500	.995	.996	.282	3.522
Constant	-.004	1.189	12.971	000	.014		

Source: own field survey data, 2017

Note: ***=significant at p<5%

Chi-square value χ_2	**133.868**	**P = 0.000**
-2Log likelihood	**50.319**	**N = 149**
Nagelkerke *R2*	**0.836 (83.6%)**	

Table 4.11; Binary logistic regression results

Characteristics	Categories	**Saving Habit**		P-value	Crude Odds Ratio(**COR**)	95% C.I.for EXP (B)	
		Yes N (%)	**No** N (%)			Lower	Upper
Education level	Illiterate	13(28%)	89(86%)	0.000	16.137	6.869	37.910
	Literate	33(72%)	14(14%)				
The distance of FFIs discourage you to save money?	No	26(57%)	20(19%)				
	Yes	20(43%)	83(81%)	0.000	5.395	2.522	11.540
Do you get /have/ Access to credit service?	Yes	36(78%)	36(35%)				
	No	10(22%)	67(65%)	0.053	6.700	2.983	15.050
Did you have access to training about saving?	Yes	43(93 %)	7(7%)				
	No	3(7%)	96(93%)	0.019	7.987	3.534	18.054
The longest market distance discourages you to save money in FFIs?	No	27(59%)	11(11%)				
	Yes	19(41%)	92(89%)	0.002	11.885	5.042	28.019
Do you think annual expense affects your saving habit?	No	11(24%)	71(69%)				
	Yes	35(76%)	32(31%)	0.022	5.553	2.617	11.781

Source: Own field survey data, 2017

4.5.3. Interpretation of the Binary logit Regression Results

Distance from formal financial institutions: the model result of the study confirmed that distance among institution and households affects positive and significant at 5% probability level. The model result revealed that those households who are residing near to formal financial institutions had more access to save whereas those who are residing at far distance from formal financial institutions had less access to save in formal financial institutions due to distance factor. Other things constant being, the crude odds ratio result indicated that households who live in far from formal financial institutions not save 5.4 times likely than households residing near to the formal institutions(p-value=0.000; COR=5.395). The possible explanation for this is that as the sampled households' are near to the financial institutions; they would have more access to use the service than the one in far places.

The result is inconsistent with the hypothesis, but it was similar to the previous finding of Chemonics International (2007), he identified distance remains a major barrier to formal financial saving and other markets in rural areas in SSA especially in rural Uganda, only 10% of the population has access to basic financial services. Sebhatu (2012) also indicated that as financial institutions are far to the households' house, they would have been spent more resources (time, labor) to access financial products and services.

Hence, it can be concluded that respondents who are in near of the formal institutions have location advantage and are more likely to save their money than those living in distant places. Thus, distance to formal financial institutions, probably hinder regularity of the households saving as well (see table 4:11).

Access to credit for households head: The model result indicated that access to credit service has positive and significantly affects rural households saving habits at 5% probability level and it is in line with the hypothesis. The crude odds ratio result revealed that if the rural households have access to credit services, the probability of households saving into formal institutions increases by 6.7 times than households did not have access to credit service (p-value=.053;OR=6.7). This implies that rural households with more access to credit would higher tend to save more in formal financial institutions. This would have possibly meant that in study area those households' who have access to credit services like micro finances are usually involved in pre-loan saving.

The purposes of credit were for productive activities like purchase of agricultural inputs (improved seeds, fertilizers) and income generating activities can improve households saving status. This finding was similar to Obayelu (2012) that show positive and significant effect between credit access and rural households saving status and contrary to Adeyeno and Baire (2005) that shows negative and no significant effect between credit access and rural households saving status.

Hence, it can be concluded that households who had credit services (access to credit services) were enabling households to expand their income earning option and it can enable to save their money more likely than those had not gotten credit service (see table 4:11).

Annual expenditure of households head: According to the study results, annual expenditure of sampled households has positively and significantly influenced households saving status at the 5 % probability level in the study area but the result was inconsistent with the hypothesized the odds ratio result revealed that saving increased by a factor of 1 when their annual expenditure is increased by 1 unit, other factors being constant (p-value=0.022; OR=5.553). This implies that as income of the sampled households' increases, their expenditures increases in some amount similarly their saving also increases. The possible explanation is as savings increase with increase in the level of expenditure there is a possibility that the expenditure is utilized on productive agricultural activities. This can lead to the creation of additional asset and can increase savings and subsequently expand investment. The finding was similar to the work of Rehman *et al.* (2010) that shows a positive relationship between expenditure and rural household saving. The odds ratio of the model indicated that being households saving decreased 5.6 times when their annual expenditure is increased other variables are held constant.

From the model results it can conclude that the more the households spend, it reduces their saving ability (see table 4:11).

Education level of households head: model results showed that the education level of households has positively and significantly influenced rural household savings habit and it is in line with the hypothesis. According to the odds ratio result revealed that getting educated households, they are more likely to save in formal financial institutions. Based on the model result, literate household heads had 16.137 times more odds-ratio of saving than illiterate household heads or the probability of saving is increased by this much (COR 16.137, P-value 0 .000).

The most probable reasons for this are education increases the ability of farm households to access information, make rational decisions about saving, and increases farm management skills of farmers that have a positive impact on their farm output and income. This in turn will increase rural household saving. Moreover, it increases the ability and skill of farmers to engage in non-farm activities.

The finding of the researcher agrees with the findings of previous researchers who found that there is a direct relationship between education and household savings (Bersales and Mapa, 2006; Girma *et al.*, 2013; and Aron *et al.*, 2013). However, it is inconsistent with the findings of others like Hussien *et al. (*2007*),* Rehman *et al.* (2010) and Kifle (2012) who found that education and household saving are inversely related.

Hence, it can possible to conclude that education helps the household head's to save in financial institutions and because the capacity created would help them to analyze, interpret and make use of it than illiterate household head's as well as enhance information seeking behavior as well (see table 4:11).

Access to Training for households head: It is quite clear that training is one of a key factor deserving attention to raise the level of farmers` awareness about savings. According to the model results of the study, access of training regarding on saving culture has positively and significantly influenced households saving status at the 5 % probability level and the result was in line with the hypothesis. The odds ratio result indicated that other factors constant, households who did not train on saving was 7.987 times more likely not saving their money in formal institutions than trained households (COR 7.987, P-value .019). Or it revealed that the probability of households saving is increased 7.987 times as a household gets access to training or awareness regarding on saving. It showed that there is substantial variation in the saving behavior of rural households who obtained access trainings related to saving and those who did not get trainings.

The positive relationship between training and households saving habit indicated that households get awareness and motivation from the training was enhances their saving improvements because they get more information on the benefits of savings.

Finally, short-term awareness raising trainings focus on improving the skills of farmers on specific topics, saving in this case, which enhances income and saving.

The finding agrees with the finding of Girma *et al.* (2013). Other studies either in Ethiopia or outside Ethiopia have not included this variable as one of the determinants of saving.

Based on the results it can possible to conclude that understanding about the benefits of households saving through training might encourage them to save higher and higher.

Distance of Market center from households head: The model result of the study confirmed that the market distance to input and output (market) center positively and significantly associated with household's savings habit at 5% significance level.

The crude odds ratio result revealed that, other things being constant, being households who residing far to market center not save 12 times more likely than households living near to the market center (p-value=0002;OR=11.885). On the other hand, households residing far saving habit decrease as the market distance increases by one kilometer.

This result implies that households who are residing near to market center had more access to save than households living far market center, because they can easily sell their farm output at a relatively higher price, get easy transportation facility and earn more income as oppose to those who are far from the market distance.

Thus, based on the model results distance to market center were positive and significantly associated with the savings habit of households. The result is contradicted with expected hypothesized of this study and with the finding of Ebrahim, 2006 in his study distance has negative influence on households saving habit and significant at 1% probability level. But in line with the finding of lanjouw *et al*. studied in tanzania and smith *et al*. studied in Uganda show that a better access to market center increases households earnings.

Hence, it can possible to conclude that distance to market leads to higher transaction cost which reduces the saving habits of households as well as it probably hinder regularity of their saving as well. (see table 4:11).

4.5.4. Multi- variable Regression Analysis

Binary logit regression was calculated first and basic odds ratio were estimated. Then, to determine the best subset of explanatory variables that are good predictors of the dependent variable, significant variable during binary logistic regression which at less than the p-value <0.2 was shifted to multiple variable logistic regressions to avoid the role of cofounder and adjusted odds ratio are estimated and factors affecting household's saving habit was identified at the cut point of p-value less than .05. So, among ten variables, four were the most significant factor with respect to households saving with less than 0.05 were includes;-annual expenditure (ANEXP), education (EDUC), Access to training (ACCTRNG) and distance to market center (DISTMKTC).

The effects of the above significant explanatory variables on saving among rural households in the study area were discussed below.

Table 4.12; The multi-variable logistic regression results of the factors influencing rural households saving habit.

Multi variable Regression Results	**P-value**	**AOR(sig.)**	**95% C.I.for EXP (B)**	
			Lower	Upper
Access to Training	0.000*	14.017	3.487	56.342
Market Distance	0.000*	10.984	3.085	39.111
Annual Expenditure	0.007*	2.786	.905	8.576
Educational level	0.000*	38.481	9.100	162.721
Constant	0.000	.009		

a. Dependent Variable: Measurement of households Savings status

Source: Own field survey data, 2017.

4.5.5. Interpretation of the Multi variable logistic Regression Results

Access to Training for household's head: According to the model result providing accessibility training for households were statistically significant at the 5 % significance level and positively

influences the dependent variable, saving status. This implies that in addition to the formal and informal education, giving short-term trainings on saving is enhancing the households saving motivation.

The adjusted odds ratio result indicated that other factors constant, households who did not train on saving was 14 times more likely not saving their money in formal institutions than trained households (AOR 14.017, P-value .000).

This showed as households were getting training, they are more likely to save their money in formal financial institutions. Based on the model result, trained household heads had 14 times more odds-ratio of saving than untrained household's head. The possible explanation for this is that obtaining access training regarding on saving helps the household head's to save in financial institutions and because the awareness created would help them to improve the saving culture than untrained household head's. Therefore, awareness gained through training might give a chance to encourage them to save, because there was a great awareness gap founded among rural households regarding on saving.

The research finding is in line with the hypothesized training was a positive and significant effect on savings habit. And it is in line with the finding of Girma *et al.* (2014) and with the hypothesis expected. Other studies either in Ethiopia or outside Ethiopia have not included this variable as one of the determinants of saving. However, it should be treated separately from education level because it is found to be a significant variable. Moreover, it is different from a number of years of schooling (education level) which is long term and formal, but the training on saving is usually short term and very much specific.

Hence, it can possible to conclude that the emphasis on short-term trainings and awareness creation on saving has to continue to improve the performance of saving in the study area (See table 4.12).

Distance to Market center: market center is one of crucial social infrastructures for rural community to purchase inputs and sells of agricultural outputs. The model result of the study confirmed that distance to market center (input and output) center was positive and significantly associated with the probability of household's savings habit at 5% significance level (p-value=0.000 and AOR=10.984).

The Adjusted odds ratio result revealed that, other things being constant, households who residing far to market center decrease their saving habit by 11 times than households living near to the market center. On the other hand, households residing far saving habit decrease as the market distance increases by one kilometer.

It assumed those respondents closer to the market center will get a better opportunity to buy and sell marketable commodities in a relatively short time. On the other hand, households who dwelled far away from the main market center expected to travel long distances, which compete their time to participate in common/social activities and run income generation activities effectively.

Thus, based on the model results distance to market center influences the savings habit of households positively and significantly. This is in line with the finding of lanjouw *et al* in Tanzania and smith *et al* in Uganda show that a better physical access to markets increases non-farm earnings, but it is contrary to the expected hypothesized of this study and the previous finding of Ebrahim, 2006 in his study distance has negative influence on households saving habit.

Hence, it can possible to conclude that distance to market leads to higher transaction cost which reduces the saving habits of households and it probably hinders regularity of their saving as well. But inversely better access to market center encourages the saving ability of households.

Annual Expenditure of household's head; - according to the model results indicated that the annual expenditure had statistically significant and positive effect on rural households' savings status in the study area but this result is inconsistent with the hypothesized expected. The adjusted odds ratio (AOR) results revealed that, Other factors being constant, households saving increased by a factor of 1, when their annual expenditure is increased by 1 unit. This implies that as income of the sampled households' increases, their expenditure increases in some amount similarly their saving also increases.

The possible explanation is as savings increase with an increase in the level of expenditure there is a possibility that the expenditure is utilized for productive agricultural activities. This can lead to the creation of additional asset and can increase savings and subsequently expand investment. The finding was similar to the work of SSA (Beck *et al*., 2008). But contrary with Rehman *et al.* (2010) that shows a negative relationship between expenditure and rural household saving.

From the model results it can conclude that the informal saving has contributed for unnecessary expenditure due to saving may be, at home or relative that could be easily withdrawn at any time for unproductive activities. So, more the households spend, it reduces their saving ability.

The education level of household's head: As the model result indicates, the variable of household's educational level is statistically significant at less than 5% significance level and positively influenced the households' saving habit, dependent variable P-value =0.000 and AOR=38.481). The result is contrary to the hypothesis.

This finding indicates that those households with a high educational level are more likely to save into formal financial institutions than those who less educated. This is due to most probably educated person gain better awareness, experience, knowledge regarding on savings and this again help them to engage in improving their saving cultures. Literate households are very motivated to get information and use it. The odd ratio result reveals that, holding other variables constant, being illiterate household's head was 38 times more likely not save their money than literate household's head.

Thus, education is an essential tool in improving the household's head with the necessary awareness and skills which enables them to save their income than uneducated ones.

This research finding is agreed with the hypothesized effect of households, education on savings status and the finding of (Alma and Richard, 1988), Lawrence, et al (2009), Girmaet al. (2014) in their research found education as an essential instrument in increasing awareness among rural households savings culture from their income obtained.

Hence, it can conclude that education can help to improve the effectiveness of saving among rural households headed and more educated rural households were more likely to save their money in formal financial institutions (See table 4.12).

CHAPTER FIVE

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. Summary

With regards to the investigation into the savings habit of rural household heads in Mana, this research has provided some insight into how some of those factors interact and affect the savings habit of households in Mana.

This study hypothesized a total of 15 explanatory variables to have an influence on the dependent variable, households saving habit. These variables were; socio-demographic characteristics (sex, age, education level, marital status, family size and religion), socio-economic (annual income, annual expenditure, market distance), institutional factors (distance from financial institutions, access to credit, access training and access to information) and variables related to saving institutions (transaction cost and interest rate).

The methods of data analyzed were like frequency distribution, percentage, mean and standard deviation were used. And also associations and differences in characteristics between independent and dependent variables were checked through inferential statistics (chi-square and t-test). Moreover, the Binary logistic regression was calculated first and basic odds ratio were estimated. Significant variable during binary logistic regression which (p-value <0.2) was shifted to multiple variable logistic regressions to avoid the role of cofounder and adjusted odds ratio are estimated and factors affecting household's saving habit was identified at the cut point of p-value less than .05.

In the demographic factors (variable) characteristics, such as sex, marital status, age, religion and family size of the households were hypothesized to have a negative relationship with rural households saving status. And also the descriptive statistics revealed that all except religion had no statistically significant association with rural households saving status. The educational level of the household's head was hypothesized positive relation with saving status. And also the descriptive statistics revealed it had statistically significant association with rural households saving status.

But the model result revealed the only educational level of the household's head had a positive and significant association with households saving status.

In the socio –economic factors (variables) like distance from formal financial institutions, annual expenditure of household's head and distance to market center from household's resident were hypothesized to have a negative relationship whereas annual income were hypothesized to have a positive relationship with rural households saving status. But the result of the descriptive statistics showed that all have a statistically significant association with rural households' savings status. But the binary model results indicated that annual income had no significant association.

In the institutional factors like transaction cost and saving interest rate were hypothesized to have a negative relationship with rural households saving status. The result of the descriptive statistics also showed that distance from formal financial institutions and interest rate had statistically significant association with rural households' savings status. Also transaction cost had no statistically significant association with rural households' savings status. Access to credit service, access to information and Access to training was hypothesized to have positive associations with rural households saving status. The result of the descriptive statistics showed that both credit access and access to training had significant effect on rural households' savings status. But access to information had statistically insignificant association with rural households' savings status.

The results of the multi variables logistic regression model indicated that the education level of the household heads, distance to market center, access to training and annual expenditure had positive and statistically significant effect on rural households saving status.

5.2. Conclusions

The study was conducted in Mana woreda, Jimma Zone, Oromiya regional states, Ethiopia. With regards to the investigation into the savings habits of household heads in Mana, this research has provided some insight into how some of those factors interact and affect the savings habit of households in Mana.

The specific objectives of the study were to assess the influence of socio-demographic factors on households saving habit, to identify the effects of socio-economic factors on rural households saving habit and to investigate the effects of institutional factors on rural households saving habits in the study area.

The descriptive analysis showed that some rural households practiced saving in formal financial institutions and the common reasons for rural households no saving in formal financial institutions in the study area were; they had low income, they were not aware about saving habit and since the formal financial institutions are far.

Moreover, the multi–variable logistic regression analysis was conducted. The model results suggest that the saving habit of rural households was influenced by four the most essential variable factors. Those were education level of household heads', access to training, market distance and annual expenditures were influenced positively and significantly associated with saving habit among rural households.

Providing access to training for households were statistically significant and positive associations with households saving status. It revealed that trained households were more likely to save their money in formal financial institutions than untrained one. Annual expenditure had statistically significant and positive effect on rural households' saved status in the study area.

The possible explanation is as savings increase with an increase in the level of expenditure there is a possibility that the expenditure is utilized for productive agricultural activities. Household heads' education level enhances households' awareness to decide to save money in formal financial institutions. Distance to market center was statistically significant and positive associations with households saving status. Households who dwelled far away from the main market center expected to travel long distances, which compete their time to participate in common/social activities and run income generation activities effectively.

Over all these four independent variables were positive and significantly influences dependent variable, rural households' saving habit in the study area.

5.3. Recommendations

The study was conducted on factors affecting rural households' savings habit in Mana district, Jimma zone in Oromia regional state of Ethiopia. The findings of the study identified major factors regarding households saving habits in the study area; the following recommendations are forwarded for better future improvement of the saving habit among rural households in the study area.

According to the study result education level of the household's head has a significant and positive association with a savings habit of households. Thus, recommended that appropriate strategies like strengthening and expanding both formal and informal types of education in rural study area in order to improve and make illiterate rural households have a better understanding towards savings in the study area.

According to the study result, access to training had a positive and significant influence on household saving habit. Therefore, it's recommended that concerned bodies need to be designed policies and appropriate strategies to create awareness of rural households in the study area though providing necessary training to promote households saving culture. In addition to awareness creation, financial institutions will better recognize (awarding) good savers of households in order to motivate non-saver households.

According to the study result, market distance has a positive and significant impact on rural households saving habit. The possible explanation for this is that households residing far to market center lead to incurred higher transaction cost which reduces the benefits of the households.

Therefore, it's recommended that policy intervention (concerned bodies) better to emphasis on the easy access of main market centers (expand marketable areas) in rural areas for those households residing to far from the market center.

According to the study result the annual expenditure of households has a significant and positive impact on rural households saving habit. It implies that obviously informal saving has contributed for unnecessary expenditure due to saving may be, at home or relative that could be easily withdrawn at any time for unproductive activities.

But based on the study results, the majority of the rural households was spending their incomes on unexpected medical expenses and to purchase agricultural inputs like fertilizer and improved seeds. Therefore, it recommended that in order to protect rural households from unnecessary expenses or over costs, concerned bodies (both government and non-governmental organizations) is better to design policies and strategies to minimize the expenditures of the rural households through facilitating the program of National Health Insurance Scheme for unplanned medical expenses as well strengthening rural cooperative unions those who distributes or prepare agricultural inputs (fertilizer and seed improve) for farmers nearly without incurring additional costs.

Generally, the model analysis showed that household heads' education level enhances households' awareness to decide to save money in formal financial institutions. Households with accesses to training enhance rural households' savings. Households with low annual expenses would like to save more in formal financial institutions. Distance from market centers significantly affects rural households' savings in the study area. Developing strategies that promote rural household savings in rural areas is an integral part to achieve economic growth in the study area.

5.4. Future Research Direction

The findings of this study have verified that households have the potential to save, and even increase their savings when their awareness towards saving and educational level among as well as access to market center and other factors improve.

In order to improve the saving culture of rural households, the government, financial and non-financial institutions and other corporate bodies have a role to play to take advantage of these potentials and opportunities. And also, the government can pursue policies that will increase the income base of the people and help them cut down their expenses to induce savings.

The ability of future studies to value assets and capture it in the savings will give a detail understanding of household savings behavior for rural households. It will be interesting to add additional factors to gain more in-depth understanding of household savings habit factors.

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APPENDIX I

JIMMA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF MANAGEMENT

MASTER OF BUSINESS ADMINISTRATION

Questionnaire

Dear respondent

This questionnaire is designed to collect relevant information from selected respondents to aid in the assessment of the ’Factors Affecting Rural households Savings Habit’’ A case study of Jimma Zone Mana District.The information required is strictly for academic purpose and there are no right and wrong answers. The findings will be helpful to policy makers who are concerned with rural household’s development and also help financial institutions to device policies to improve performance. Any information provided would be treated with the utmost confidentiality and shall be used only for the intended purpose. Your candid opinion is highly solicited.

I want to take this opportunity to thank you for availing yourself and thereby contributing towards making my thesis success.

Thank you for your co-operation!!!!

Name of the Kebele_____ Signature of Participants _____

SECTION A: SOCIO-DEMOGRAPHIC FACTORS

1. What is your age? _____
2. Sex: 1. Male □ 2. Female □
3. Educational Level: 1. Illiterates □ 4. Secondary (Grade 9-12) □
   2. Primary (Grade 1-8) □ 5. Territory □
4. Marital status: 1. Single □ 2. Married □ 3. Divorced □ 4. Widowed □

5. Religion: 1. Protestant □ 2. Orthodox □ 3. Islam □ 4. Catholic □ 5. Other, specify…
6. How many household members do you have? (Family size) _____

SECTION B: INSTITUTIONAL FACTORS

1. Saving

1. Did you save money in formal financial institutions?
   1. Yes 0. No

4. If your answer for question "1" is **No**, why?

S.no	Reasons	Yes	No
2 . 1	Lack of awareness about saving		
2 . 2	Saving institutions are far		
2 . 3	since the household income is low		
2 . 4	Other (specify)…….		

2. Distance from Financial Institutions

1. Do you think that distance is a problem to save money in formal financial institutions?
   1. Yes 0. No

2. How far is your home from formal financial institutions? _____km

3. Is accessibility of road discourages you to save money in formal financial institutions?

   1. Yes 0. No

3. Access to Credit Services

1. Do you have access to credit service? 1. Yes 0.No

2. Where do you get credit service? Please tick in the below table

S.no	Credit sources	Yes	No
2 . 1	Commercial Bank		
2 . 2	Awash International Bank		
2 . 3	Harbu MFI		
2 . 4	WALQO		
2 . 5	Credit & saving Cooperatives		
2 . 6	Idir		
2 . 7	Local money lenders		
2 . 8	From Other (specify)……		

3. What was the purpose you want to get credit service? Please fill below table (tick)

s.no	Purpose of Credit Service	Yes	No
3 . 1	Repayment of other loan		
3 . 2	To run business		
3 . 3	To construct /build/house		
3 . 4	For consumption/Basic needs		
3 . 5	To purchase OX, fertilizers & improved seed		
3 . 6	Others (specify) ……		

4. Do you think the loan interest charged per year is fair? 1. Yes 0. No
5. Did the credit service you get bring significant change on your saving habit? 1. Yes 0. No

1. Access to Training/ motivation and awareness

1. Have you taken any training on saving? 1. Yes 0. No
2. Have you observed Banks involved in creation of motivation and awareness through training among rural households with regard to saving? 1. Yes 0. No

3. Have you observed Harbu microfinance institution involved in creation of motivation and awareness through training among rural households with regard to saving? 1.Yes 0.No
4. Have you observed OCSSCO involved in creation of motivation and awareness through training among rural households with regard to saving**?** 1. Yes 0.No
5. Have you observed rural credit and saving cooperatives involved in creation of motivation and awareness through training among rural households with regard to saving**?** 1.Yes 0.No

5. Access to Information

1. Have you heard any information regarding on saving? 1. Yes 0. No
2. Where did you get information about saving…..?

s.no	**Source of information**	**Yes**	**No**
2 . 1	Banks		
2 . 2	MFIs		
2 . 2	Cooperative union (society)		
2 . 4	mass media		
2 . 5	Others (specify)-------		

3. Do you think accessibility to information bring significant change in your saving habit?

1. Yes 0. No

6. Market Distance

1. Is there market in your locality? 1. Yes 0. No
2. Does market distance affect your marketing activity and savings? 1. Yes 0. No
3. Do you think access to market place encourage you to save money in formal financial institutions? 1.Yes 0.No

SECTION C: SAVING INSTITUTION FACTORS

7. Transaction Cost

1. Do you think the transportation cost affects on your saving habit? 1. Yes 0.No
2. Do you think the time is a problem to save money in formal financial institutions**?**
   1. Yes 0. No
3. Do you think that consumption cost is a problem to save money in formal financial institutions**?** 1. Yes 0. No

7. Interest Rate

1. Do you know the interest rate of formal financial institutions given to savers?
   1. Yes 0. No
2. Do interest rate discourages you to save money in formal financial institutions?
   1. Yes 0. No

SECTION D: SOCIO -ECONOMIC FACTORS

9. Annual Income

1. What are major sources of your annual incomes?

s.no	Sources of Income	Yes	No
2.1	From off/non/-farm		
2.2	From farm (including coffee, chat)		
2.3	Others (specify)… … …		

2. The estimated income you get annually from both is----------birr

3. Do you deliberately save part of what you earn? 1. Yes 0. No

10. Annual Expense

1. The estimated annual expenses from your income----------birr
2. Do you have annual spending plan? 1. Yes 0. No
3. What are major purposes of your expenses?

	Purpose of the Spent	**Yes**	**No**
3.1	Housing purpose		
3.2	To cover school expenses		
3.3	To purchase fertilizers & improved seed		
3.4	Other specify……..		

APPENDIX II

CHECKLIST FOR FGD

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MBA PROGRAM

The purpose of this focus group discussion is to explore the factors influencing the rural households saving habit in the study area. To draw some conclusions and forwarding possible recommendations, this might be helpful for making some practical interventions by the concerned bodies. So, your kind cooperation with honest responses active participation to focus group discussion will be vital for the overall success of the study. The study is purely for academic purpose and the information you will provide is to be treated as confidential and cannot be traced to the person who provided them.

1. What are the main factors affecting saving in formal financial institutions?
2. What is your view on formal financial institution's in saving mobilization?
3. What are the challenges that discourage people to save in the formal financial institutions?
4. What are the methods used to encourage and inform people to save their money in the formal financial institutions?
5. How do you express the changes in saving among rural households?

THANK YOU!