



SCHOOL OF GRAGUATE STUDIES

**RURAL WOMEN EDUCATION ACCESS AND ITS EFFECT ON
THEIR LIVELIHOOD IN KEBENA SPECIAL WOREDA, CENTRAL
REGIONAL STATE OF ETHIOPIA**

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**Rural Women Education Access and its Effect on their Livelihood in
Kebena Special Woreda, Central Regional State of Ethiopia**

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Planning and Management**

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DECLARATION

I hereby by that this MA thesis is my original work and has not been presented for masters in any other university, and all sources of material used for this thesis have been duly acknowledged.

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ABBREVIATIONS AND ACRONYMS

CSA	Central Statistics Agency
DHS	Demographic and Health Service
ECA	Essential Commodities Act
ESDP IV	Educational Sector Development Program Intrinsic Value
FDRE	Federal Democratic Republic of Ethiopia
IFAE	Integrated Functional Adult Education
FHH	Female House Hold
MHH	Male House Hold
MoE	Ministry of Education
MoFED	Ministry of Finance and Economic Development
KSWWCAO	Kebena Special Woreda Women and Children Affair Office
SLA	Sustainable Livelihood Approach
SPSS	Statistical Package for Social Science
UN	United Nations
UNESCO	United Nation Educational, Scientific and Cultural Organization
UNICEF	United Nation International Children’s Emergency Fund
WASH	Water Sanitation Hygiene
WKU	Wolkite University
WMS	Warehouse Management System

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ABSTRACT

The aim of this study was to assess rural women education access and its effect on their livelihood in kebena Special woreda, Central Regional State. The study employed Descriptive and Explanatory research design. Purposive, proportionate stratified and simple random sampling techniques were used to select 358 rural women, 20 interviewees from male headed households. Primary data was collected using self – administered and interviewer - administered questionnaires and interview. Secondary source of data was used by reviewing documents. Descriptive statistics was used to analyze the quantitative data and multiple linear regression analyses were used. Qualitative data was collected and narrated systematically using content analysis approach to support the quantitative data analyses results. The findings' of the study unraveled that no sufficient access to education for most of women and poor status of women education in the study area. The one – way ANOVA test results indicates the existence of significant differences between the educational statuses of women in their livelihood. Furthermore, the linear regression analysis results revealed status and access to education significantly affected the livelihood of most women accounted for 78.3% of the variance on the livelihood of most of the women in the selected kebeles. Therefore, from the results of the study it can be inferred that great majority of women are not in a position to manage their livelihood because of their low status of education and insufficient access of education. Thus, this study suggests that concerned bodies on rural women education and livelihood have to give serious attention and work hard in creating ways to improve women education as well as their livelihood.

Key Words: *access, education, livelihood, status, women*

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

Quality of education and training in a variety of skills in rural areas is therefore needed to attain sustainable rural livelihoods. For a rural population to thrive there is a need for livelihoods that would sustain and support their households and communities (Weldemichael, 2018).

In this regard, the study conducted by Addai-Boateng (2019) on Poverty and Development: Role of Education in Poverty Reduction in the Ada East District of Ghana found that 91.8 percent of indigenes of the district value education and conceive it as essential to the process of development and poverty reduction. Again, the study found out that the government has put in place several policies geared towards poverty reduction. Such policies included free education for all Ghanaians from basic to high school level aimed at increasing school enrolment rates and Business Advisory Centers (BAC) established in the districts to reduce poverty, improve living conditions, and increase the income of women and vulnerable groups through self and wage employment.

In the Ethiopian context, Ethiopia has made remarkable progress towards girls' education, increasing net primary enrolment rates from 51 percent in 2003/04 to 95 percent in 2016/17. However, only 53 percent complete primary school, 25 percent of secondary school-aged girls are attending secondary school, and an estimated 10 percent go on to enroll in college. Girls face several challenges in attending safe schools with quality education; including Too often families favor boys when investing in education. Poverty compounds factors that keep girls out of schools, such as early pregnancy, child labor, housework, and cost and distance to school (10.9 million girls were enrolled in over 39,000 primary and secondary schools, but 1.6 million Primary and secondary school-aged girls were out of school); girls face harmful social norms. Child marriage rates in the country (40% of girls were married as children) are Therefore, from this point of view investing in females' education is inevitable, since females

are part of a vibrant new generation in Ethiopia poised to take on their future. Investing in their education allows them to achieve their dreams. It lets them build better lives for themselves and contribute to the health, safety, and prosperity of their families and communities. Investing in girls' education can bring change in a generation, giving girls opportunities to enjoy the benefits of this education.

1.2. Statement of the Problem

Many organizations seek to alleviate poverty in the developing world, often focusing their interventions on women. The role, status, and education of women are fundamentally important facets of development. Thus, understanding the interaction of women's educational level and their livelihood is important. In this regard, studies conducted by Klasen (2002); Bloom, Canning and Chan(2006) have shown that women's education has a positive direct and indirect effect on economic growth through reducing fertility rate and infant mortality and increasing labor participation, total factor productivity, health, and life's conditions. However, women's contribution to economic growth and wellbeing is far below their potential, which leads to serious macroeconomic consequences, especially, in developing countries including Morocco, Algeria, Tunisia, and Egypt (2014).

Prior studies, for instance, Hiwot (2011); Tigist (2011) signified that the involvement in agricultural activities is highly influenced by rural women's level of education. They pointed out the significant and positive relationship between women's level of education, degree of participation in aquaculture, and their extent of empowerment implying that the empowerment status of women can increase with their increased participation in agricultural activities as a function of education. As agriculture is a relatively profitable income-generating activity, women participating in it gain more control of the economic and social returns from it. On the other hand, Tsegaye et al. (2021) investigated the effect of demographic factors in none/off-farm economic activities on gender perspective in Ethiopia and they found that age and education level have a positive and significant effect on increasing non-farm activities and confirmed that these variables should take into account in policy development to increase their impact on livelihood diversification. However, as they further pointed out, gender has a significant negative effect on livelihood diversification.

Studies revealed that women play major roles in livelihood security in Ethiopia. For instance, a study conducted by Belay (2018) on Ethiopian Somali Pastoral and agro-pastoral communities in two districts pointed out that woman in both social settings, in addition to reproductive roles; largely participate in productive works, especially in livestock production. Most of the tasks related to the production of small ruminants, which are the largest in number and main source of income in pastoral and agro-pastoral areas, are the major activities of women. Besides, education increases one's understanding of innovations and influences the process of decision-making; education and training exposures are the most important factors. For instance, a study conducted by Tigist (2011) to assess the impact of women's education on their participation in credit programs highlighted a strong relationship between the two variables. Contrary to this, the Illiteracy of women is the main cause of low rural development and livelihood conditions in rural areas. Illiterate rural community, especially women, has a low participation in development. Limited agricultural production was the reflection of illiteracy that has left the farming community with the traditional farming system (Bekele, 2012). Moreover, there are a lot of factors affecting the rural people among which, lack of access to school or educational centers, lack of access to health care, shortage of well-qualified teachers, and poverty could be mentioned. Even if the opportunity for technology is still not yet fully provided to the rural population; these people are highly affected by a lack of education to enhance their development. On the other hand, there are various factors affecting women's participation in income-generating activities in rural areas of Ethiopia. In this regard, Abera, Tesfaye, and Aklilu (2021) shown that women's participation in income-generating activity is significantly determined by age, husband's education, women's education, family size, land size, market distance, livestock holding, and access to credit.

The Government of Ethiopia considers the education sector to play a crucial role in bringing development and transformation and empowering citizens. It has prioritized the development and provision of access to primary education to children under 15 years and Technical Vocational Education Training (TVET) to out-of-school youth and adults who have completed grade 10 and above. However, the government is not adequately addressing the effect of women's education on the livelihood in rural areas to achieve sustainable development sufficiently. Moreover, even though, the current rapid educational expansion

for girls has changed women's economic role in their households and resulted in changes in the conventional life courses of women in rural Ethiopia as they have more choices in terms of education, marriage, and the types and location of their economic activities, due to the increasing importance of young women's economic contributions to their households and their improved educational opportunities (Belay, 2018); in Gurage Zone in particular in Kebena woreda only few women used such opportunities (KWWCAO, 2021) to alleviate poverty and to sustain their economic contribution for their family.

Even though many local studies have been carried out on issues related to the topic under consideration, for instance, a study by Temesgen & Mulatu (2021) on integrated functional adult education programs and their contributions to livelihood did not describe the changes in the lives of the adult after learning. Makeda (2017) on the effectiveness of the productivity safety net program to improve the livelihood of women living in Zeway Dugda only explains women's livelihood and does not consider their education. Another study by Tadele (2019) on the challenges of rural women's livelihood coping strategies did not explain the difference between the education statuses of rural women. Samuel (2017) on the impacts of early marriage on rural girls' education in primary school did not show the positive effects of education and negative effects of lack of education on women living in rural areas like other studies.

However, in the case of Kebena Special woreda to the best of the researcher's knowledge, nil now, rural women's education access and its effect on their livelihood have not been adequately studied empirically. Besides what initiated the researcher to conduct this study on the underlined topic was his real observation and five years of work experience as a teacher in the study area. While working the researcher has observed that most of the women lack formal education and face so many problems. They do not actively engage and take part in income-generating activities; rather they are busy with the responsibility of raising children and managing the family. Moreover, as a result of the lack of formal education from lower grade level up to higher level, there are very few females in the government sector (KWWCAO, 2021).

Finally, the study will enable the women and children affairs office and other concerned government bodies in Kebena Special woreda in Central Regional State of Ethiopia to

become aware of the factors that can affect the livelihood of rural societies and motivate their productivity in their day-to-day activities, solve their family planning and living standards. The study, therefore, has sought to achieve the following objectives.

1.3. Objectives of the Study

1.3.1. General objective

The general objective of this study was to assess rural women's education access and its effect on their livelihood in Kebena Special Woreda, Central Regional State of Ethiopia.

1.3.2. Specific Objectives

The specific objectives of this study were:

- To assess the extent of educational access rates among rural women in the study area.
- To analyze the relationship between educational attainment and income generation activities among rural women in the study area.
- To assess the livelihood of rural women in the study area.
- To assess the extent of the effect of rural women's education related factors on their livelihood in the study area.
- To assess the extent of the difference between educational statuses on livelihood of rural women in the study area.

1.4. Hypothesis of the Study

Hypotheses are tested to achieve the objectives of a study based on different empirical research and theoretical review. According to Creswell (2009), a more formal way of stating research questions are developing hypotheses between explanatory variables and dependent variable. The hypothesis may be stated as an alternative hypothesis specifying the exact results to be expected. It can also be written in null hypothesis form indicating no relationship between the dependent and the explanatory variables. Thus, in this study, the researcher used the directional null hypothesis and the alternative hypothesis, as stated below.

H_{o1} : Access to education for rural women has no positive and significant effect on their livelihood in Kebena woreda.

H_{A1} : Access to education for rural women has a positive and significant effect on their livelihood in Kebena woreda.

H_{o2} : There was no significant difference between the statuses of women's education on their livelihood in Kebena woreda.

H_{A2} : There was a significant difference between the statuses of women's education on their livelihood in Kebena woreda.

1.5. Significance of the Study

In Ethiopia, there is massive expansion at all levels of formal education. However, little or no emphasis is given to functional adult literacy for the rural people who constitute 85% of the total population (Formal education and migration aspiration in Ethiopia 2018). Hence, the results of this study will remind the concerned government bodies that sustainable development in political, social, economic, and technological spheres can be ensured or the development process can proceed faster with people having at least some level of education and training. Besides, this study hopes to prove its usefulness for policymakers, development practitioners, and researchers who in one way or another are involved in rural development endeavors. Thus, this research is intended to provide an empirical analysis of the current situation of women's educational status and as a result of this, their economic empowerment in the study area. Finally, it will serve as a reference or stepping stone for individuals who want to conduct further study on similar or related topics. (Alemayehu Bishaw 2013)

1.6. Scope of the Study

The scope of a study provides the boundary or limits of the research in terms of content (i.e. dependent and independent variables to be investigated), geographical area, and period of the research (Utamu, 2014). But, this study has geographical and content scopes. Geographically, the study delimited its scope on twenty-three kebeles in Kebena Special woreda in Central Ethiopia Regional State, to make the study more manageable and feasible. The researcher has

chosen Kebena Special Woreda because the researcher has been working in this zone since 2013 and has personal insight into the issue under investigation and intends to deal with it. With regards to content, the study delimited its extent in assessing educational status and its impact on the livelihood of women in the case of twenty-three kebeles of Kebena Special woreda.

1.7. Limitations of the Study

Unquestionably, no research is free from limitations. Therefore, this study encountered some limitations. First of all the study was mainly focused on assessing educational status and its effect on the livelihood of women in the case of twenty-three kebeles of Kebena Special woreda in Central Ethiopia. In doing so, this study encountered with lack of literature review on the issue under consideration in the study area.

The other limitation was the generalizability issue (failing to include the other woredas) since the study assessed the effect of education on the livelihood of women in the selected kebeles of Kebena woreda; as a result this it might make it difficult to make conclusions about other woredas outside of the Gurage Zone, Central Ethiopia and in the country as well, i.e., the results of the findings of the study do not necessarily apply to other woredas' women living outside of the Gurage Zone, Central Ethiopia and in the country as well.

1.8. Definition of Key terms

Access to education: means equality of access to schooling of children of different social and economic classes; or equal opportunity, after schooling, in terms of outcome or results.

Household: A common definition is a group of people who pool their resources together to achieve a common goal (Robertson, 1984).

Female headed household: those households headed by a woman whose husband is no more living with them, and either he passed away or divorced (Tizita, 2013).

Status of education: Educational attainment or level of education of individuals. In other word, Educational attainment refers to the highest level of education completed by a person, shown as a percentage of all persons in that age group.

Livelihood: Livelihood is a generic term that involves several components. It comprises the capabilities, assets including both material and social assets, and activities required for a means of living (Chambers & Conway, 1992).

1.9. Organization of the Study

The study is organized into five chapters. The first chapter talks about the background of the study, the problem, and its approach which includes a statement of the problem and basic research questions, objectives of the study, significance of the study, scope of the study, limitations of the study, and organization of the study. Chapter two covers a review of related literature while the third chapter deals with research design and methodology and ethical considerations. The fourth chapter consists of the results of the analyses, interpretation, and discussions of the collected data. Finally, the last chapter presents a summary of major findings, conclusions, and recommendations.

CHAPER TWO

LITERATURE REVIEW

2.1. Definition of Education

Education is the socially organized and regulated process of continuous transference of socially significant experience from previous to following generations. The main way to receive an education is to take a course of training in the system of educational institutions ". But about twenty years ago, suddenly it became clear that such interpretation of education has significant defects. A similar answer to the proposed question was given here by panelists on Research Gate. Most of them were in agreement that "Education is the transmission of civilization ". But when this writer asked if they believe that the transmission of civilization with the help of war can be considered as a kind of education, no one answered, and the debate was cut short. These remarks show that the obvious answers to the question are not as good as they seem. Meanwhile, in the early nineteenth century, it was suggested the much more acceptable definition of education. This was done by Hegel. In our paper, we recall this definition, demonstrate its advantages over the others, and explain its relationship with the other key parties of the human community, namely, with the culture, the human freedom, and the morality.(The impact of education on rural women's participation in political and economic activities Alemayehu Bishaw Bahir Dar University, Bahir Dar, Ethiopia. Accepted 10 December, 2013)

2.2 Purpose of rural women education

Women's education is important for many reasons. Educated women's are more likely to have better health outcomes, earn higher wages, and have greater economic opportunities. Education can also help women gain the skills and knowledge necessary to be better mothers, workers, and citizens. In addition, educating women can lead to more stable and resilient societies that give all individuals, including men, the opportunity to fulfill their potential.

In Ethiopia, rural women's education is particularly important because it can help reduce poverty and promote sustainable development¹. Educated women are more likely to participate in the labor force, which can help increase household income and reduce poverty¹. Education can also help women gain the skills and knowledge necessary to engage

in sustainable agricultural practices, which can help improve food security. .(The impact of education on rural women’s participation in political and economic activities Alemayehu Bishaw Bahir Dar University, Bahir Dar, Ethiopia. Accepted 10 December, 2013)

2.3 Factors that affect women education in rural area

Socio-Cultural

A major deterrent to female take up and follow through of educational opportunities (even when these are available) is a near universal fundamental cultural bias in favor of males. The widespread operation of patriarchal systems of social organization; of customary early marriage; of the incidence of early pregnancy (in and out of marriage); of heavier domestic and subsistence duties of females (especially in rural areas); a generally lower regard for the value of female life, all combine though differentially in each case, to adversely affect the participation of girls and women in formal education. To this list may be added problems of seclusion and security in some areas. Such long standing constraints result in a dearth of female role models that could challenge the traditional one that is clearly acquired by both sexes at a very early age.

The influence of this factor can only be overcome, inter alia by a profound change of attitude on the part of influential males, and in some countries of traditionally minded powerful females in key family positions.

Economic factors

Together with the fundamental socio-cultural bias in favor of males, the economic factor, especially in terms of grinding poverty and hunger, is probably the most influential in adversely affecting female participation in education, especially in rural areas. In such harsh economic

circumstances, both direct and hidden costs to a family of sending daughters to school are perceived by parents to be prohibitive in terms of the provision of books, paper and uniforms/clothing (important for social reasons) as well as the loss of vital help at home and on the land. In most cases the contribution of females is unpaid and they may have little or no experience of the handling of money which further reduces their status and power, but increases their vulnerability.(The impact of education on rural women’s participation in political and economic activities Alemayehu Bishaw Bahir Dar University, Bahir Dar, Ethiopia. Accepted 10 December, 2013)

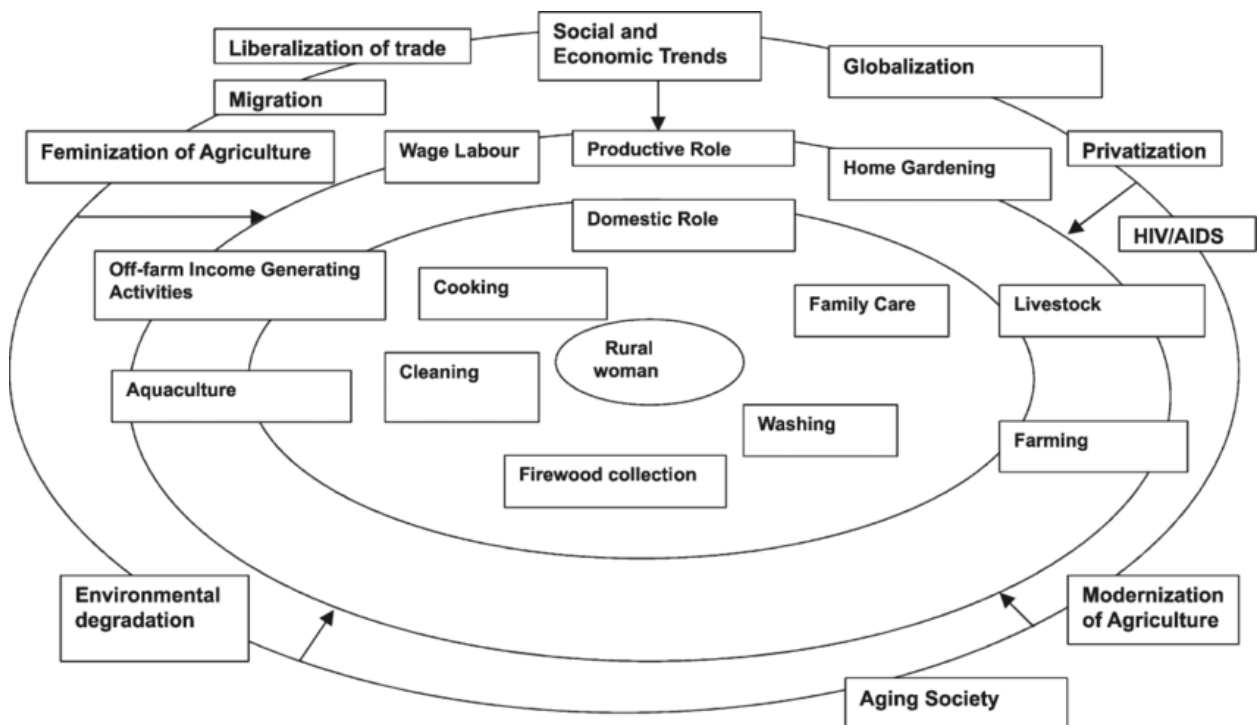


Fig.1 Conceptual framework; the role of women's in sustainable development (Adapted from Kobyashi, united)

2.1. Livelihood an Overview

Livelihood: The term livelihood is often used interchangeably with economic strengthening and refers generally to economic production, employment, and household income. A popular definition is that provided by Chambers and Conway (1992) wherein a livelihood comprises the capabilities, assets (including both material and social assets), and activities required for a means of living. Livelihood is a generic term that involves several components (De Haan, 2012). Thus, there is no universally endorsed definition to grasp the term livelihood (Scoones, 2009). Vital components of this definition are assets, capabilities, and activities required for means of living. According to Krantz (2001), assets are resources that households combine to choose between available options of living for positive outcomes. A Livelihood can be defined as the activities, the assets, and the access that jointly determine the living gained by an individual or household (Ellis, 1998). When it comes to an individual, a livelihood is the ability of that individual to obtain the necessities in life, which are food, water, shelter, and clothing. Therefore all activities involved in finding food, searching for water, shelter, clothing, and all necessities required for human survival at individual and

household levels are referred to as a livelihood. Approximately 90 % of rural households are involved in farming activities (Davis et al., 2010a, b). In Africa, 70 % of the household income in rural areas is from farming activities, while in Asia and Latin America, 50 % of the income is from farming activities (Davis et al., 2010a, b). In these rural populations small-scale farming, fishing, raising livestock and non-farm activities are some of the common livelihoods that these populations survive on as a source of income.

2.1.2. Five Capital Assets of Livelihood

Due to variations in the ability to access the necessities, some people are rich, able to acquire all their necessities without difficulty and those that are poor, and lack one or more of their necessities. The livelihood of the poor is grueling as they find themselves in a state of poverty and lack necessities. In the following, the assessment method will be described based on the fundamental concept Robert Chambers introduced in the 1980's. The five livelihood capitals, namely Human capital, Social Capital,

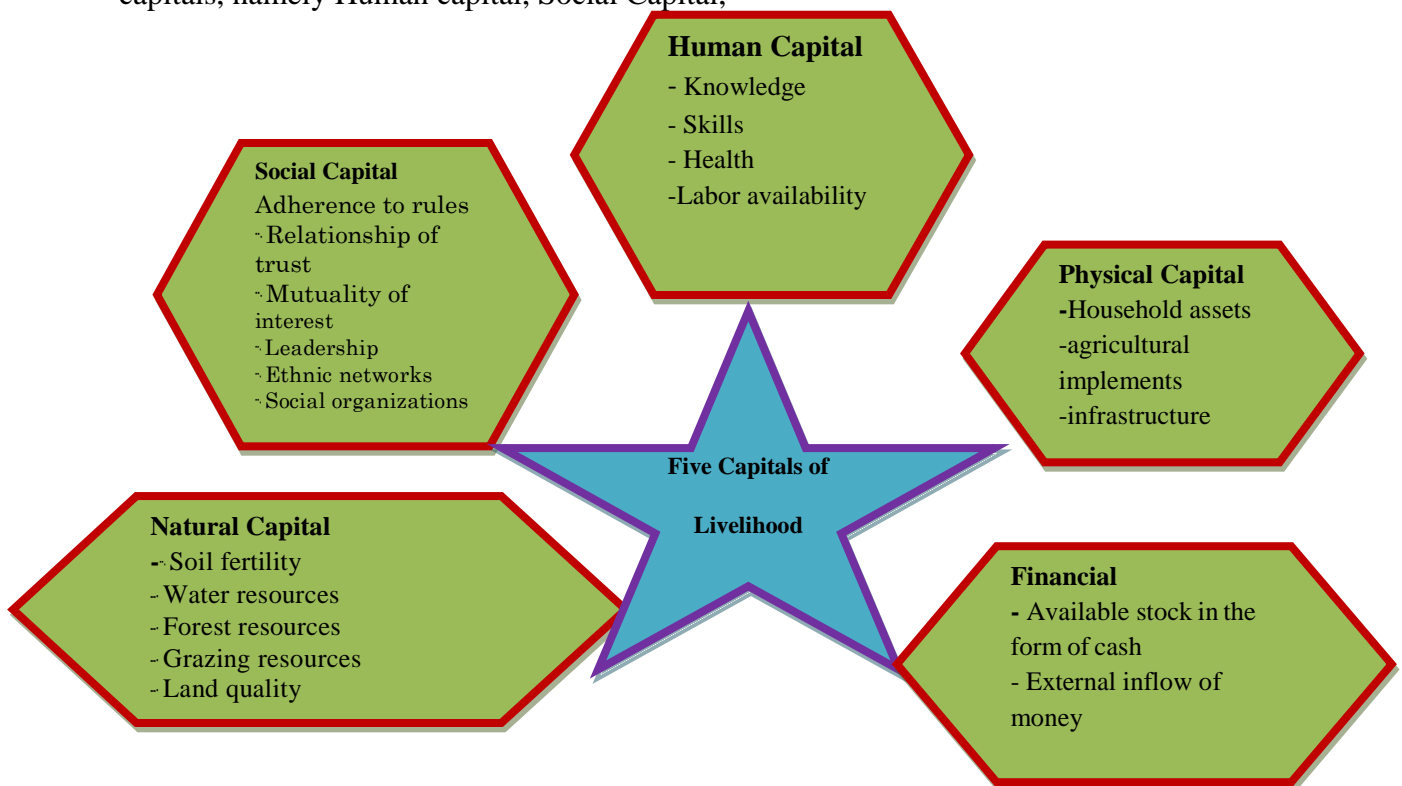


Figure2.1: Five capitals of the sustainable livelihood framework

Source: Adapted from (Jutta & Joachim, 2013)

1. Human Capital

According to the Sustainable Livelihood Approach (SLA) (Sayer and Campbell 2003), “Human Capital represents the skills, knowledge, ability to labor and good health that together enable people to pursue different livelihood strategies and achieve their livelihood objectives”. Human capital must be seen as a keystone within the SLA, for the reason that the other capitals are, at the least, partly based on the human capital as a basic requirement. Especially for rural, resource-dependent people the assessment of this capital implicates difficulties, as indigenous knowledge is difficult to evaluate (Kollmair & Gamper, 2002).

2. Social Capital

Social Capital is, like Human Capital, difficult to grasp with distinctive indicators. Conforming to the SLA Social Capital implicates social resources, “including informal networks, membership of formalized groups and relationships of trust that facilitate cooperation” (Clark & Carney 2008, Sayer & Campbell, 2003). The nature of social capital is often determined by the social class of the stakeholder, often influenced by gender, age, and/or caste. The inclusion of stakeholders into a network or group implicates the exclusion of others which can result in an interference of development. The high local value of social capital derives from its capacity to compensate for calamities or shortages of other capitals. However, not only does the potential of communal solidarity represent the high local value of this capital, but Bebbington (1999) indicates a strong connection between social capital and poverty, apparently studies indicate that involvement in village organizations leads to an enhancement of income.

3. Physical Capital

Physical capital is a measure of the existence of physical requirements needed to support livelihood in the sense of infrastructure. The role of this asset can be seen in the context of opportunity costs, where an existing accessible infrastructure releases either labor or provides time as a resource for example education (Lax & Krug, 2013).

4. Natural Capital

Natural capital describes especially for resource-dependent communities the stock all livelihood activities are built on. This capital represents in particular rural communities, with a high proportion of poor stakeholders, an essential value that is prone to calamities. Not seldom these calamities are caused by natural processes e.g. floods, fires, seasonal storms, and earthquakes (Lax & Krug, 2013).

5. Financial Capital

Financial capital can be accumulated from two different sources; one source is represented by available stock in the form of cash or equivalent available assets such as livestock, and the other source is characterized by the external inflow of money which originates from labor income, pensions, remittances or other types of financial liabilities. Within the five capitals, the financial capital enables people to adapt to different livelihood strategies. It sets the precondition for the creation or improvement of other capitals than financial capital (Lax & Krug, 2013).

2.1.3. Rural Livelihood Determinants

According to Ellis (2000); Fabusoro et al. (2010); Khatun and Roy (2012) livelihoods are determined by several factors which include:

2.1.3.1 Availability of Land

The availability of land is apart from human capital and is also a principal in rural livelihoods (Barbier & Hochard, 2014). They have found that the area of land owned by the household has a significant and negative association with the probability of selecting a diversified livelihood.

This means that the households with large land sizes participated less in non-farm and off-farm livelihood diversification strategies and participated more in on-farm strategy only. This is plausible may be due to households with more land tend to follow agricultural intensification rather than diversification. Similarly, (Barrett et al., 2001; Corral & Reardon, 2001; Escobal, 2001; Janvry & Sadoulet, 2001; Kimsun & Sokcheng, 2013; Lanjouw et al.,

2007; Woldenhanna & Oskam, 2001) revealed that farmers with large farm sizes are less likely to diversify their livelihood strategies into non-farm and off-farm than those farmers who have small land sizes. Since large farm size supports farmers to cultivate and produce more, which in turn increases farm income. On the other hand, decreasing land sizes under population pressure may inspire rural households to diversify their sources of income.

2.1.3.2 Access to Marketing

Demissie (2013) and Gebreyesus (2016) revealed that walking distance to the nearest market yielded a positive and significant influence on the level of livelihood diversification. The likely reason for a positive and significant relationship between market distance and non-farm and off-farm activities could be that residing nearer to the market enables farm households to engage in nonfarm and off-farm activities mainly trading and service provision. Nearness to the market center provides access to additional income via non-farm and off-farm employment opportunities, easy access to information on inputs, and transportation (Dorward et al., 2003; Gemechu et al., 2015). Prowse (2015) revealed that distance to markets and towns and availability of electricity are considered location variables determinants of non-farm income diversification in rural Ethiopia. On the contrary, the more households are distant from the market center, the more disadvantaged from diversifying their livelihood income into non-farm options (Gebru et al., 2018).

2.1.3.4 Income

According to Yishak et al. (2014) and Seid (2016) incomes of the household were found to have a positive and significant influence on the household's choice of on-farm plus non-farm, and a combination of on-farm, non-farm, and off-farm livelihood diversification strategies. The conceivable explanation can be farm households with a large total income can invest in alternative livelihood strategies, especially in non-farm activities, because adequate income sources can overcome financial constraints to engage in alternative non-farm and off-farm activities. Similarly, households with high annual incomes have a high probability of choosing and diversifying their livelihood into high-income return off-farm and non-farm activities (Gebru et al., 2018).

In general, those with wealth have a wider choice of livelihood than those without. This is because with more resources one can afford an education or training which can complement or augment their skills thereby widening their livelihood capabilities, which is not the case for those without resources. A wider economic growth of a household or community creates a wider choice of livelihoods.

2.1.3.5 Access to credit and ability to borrow

Access to credit and ability to borrow: Access to credit and the ability to obtain loans allows for diversification. With enough capital to start up a new business or acquire assets that can be used to advance a livelihood, access to credit is beneficial to a household. However, the ability to raise collateral and to pay back the loan is critical in fuelling diversification; otherwise, poverty levels have increased with resultant loss of assets for non-payment of loans (Gebreyesus, 2016).

On the other hand, Credit serves as a means to be involved in livelihood diversification activities. Livelihood diversification strategies were significantly influenced by access to credit. The possible reason is with access to credit, households have basic capital to diversify into either farming or non-farming business or both (Amevenku et al., 2019). According to Reardon et al. (1998), Barrett et al. (2001), Corral and Reardon (2001), Janvry and Sadoulet (2001), Woldenhanna and Oskam (2001), Lanjouw et al. (2007), Kimsun and Sokcheng (2013), and Gebreyesus (2016) access to formal credit was found to have a positive effect on the level of livelihood diversification. Smith et al. (2001) and Davis (2004) differentiated that lack of access to financial services or the lack of credit as a limitation to the potential expansion separated from farm economic activities. The decision of households' participation in rural livelihood diversification is expected to have a positive correlation with the preferred livelihood strategy.

2.1.3.6 Gender

Gender; where a livelihood is determined by the gender of an individual. Across livelihood diversification strategies, sex has a negative and significant relationship to agriculture plus off-farm and agriculture plus non-farm plus off-farm livelihood strategy choices (Misganaw et al., 2019; Nigussie, 2017; Shambel & Rajan, 2017). On the other hand, the sex of a

household head was found to have a significant and positive relation with off-farm and non-farm wage, self, and mixed self-wage employment activities (Demissie, 2013). According to Woldenhanna and Oskam (2001), Lanjouw et al. (2007), Kimsun and Sokcheng (2013), Arega et al. (2013), and Baharu Gebreyesus (2016) the age of the household head affected the level of rural household livelihood diversification negatively and significantly. According to these findings, the age of the household head was adversely identified with farmers' choice to enhance non-farm and off-farm activities.

2.1.2.7 Education as Determinants of Rural Livelihood

According to Yishak et al. (2014), Yenesew et al. (2015), and Prowse (2015) the rural household head is highly influential in the decision-making process in the family. Regarding the education level of the household head, the more educated household heads are engaged in non-farm and off-farm diversification strategies. Education is an important determinant of participating in the nonfarm sector (Salam et al., 2019). This is because the better-educated households are fit for computing the expenses and benefits of income-generating activities and thus, empower them to participate in non-farm and off-farm activities. As the schooling year of household heads for education increases by one unit, the likelihood of probability of participation in agriculture plus non-farm income sources will increase by 6.5% (Ansho & Shiferaw, 2016).

2.1.3. Education

The research area experienced educational expansion like other areas in Ethiopia under the Education Sector Development Program (ESDP), which is the Ethiopian government's policy for education. ESDP aims to improve the gross primary education enrolment rate with geographical and gender equity (Lasonen, Kemppainen & Raheem, 2005). The program includes building schools in remote areas, shorter school days, and free education until grade 10(Lasonen, Kemppainen & Raheem, 2005). Although the ESDP was launched in 1997, the program has been in full operation since 2002 after the end of the war against Eritrea (1998-2000) (Yamada 2005) and ESDP IV has been currently under operation (MoFED 2010). The 2007 census shows that women aged 10-14 recorded the highest literacy rate at 53.3%, followed by 42.5% for women aged 15-19, and then the literacy rate dropped drastically in

rural areas in the South Gondar Zone where the research area is located (Office of the Population Census Commission, 2007). The literacy rate has significantly increased to 27.3% since the 1984 Census because only 7.4% of women aged 10 and over were literate in rural areas in the South Gondar Zone in 1994 (Office of the Population and Housing Census Commission 1998: 73).

However, there are discussions about the poor quality of education, which has not been able to catch up with the rapid educational expansion. The report “Ethiopia: 2010 MDGs Report” (MoFED, 2010) is concerned that “the overall increase in the enrollment ratios though seems to come at the expense of educational quality” (pp.14-15) because the completion rate for elementary school was low at 74% for grade 1-4 and 46% for grade 5-8, when compared to the increasing rate of enrollment (MoFED, 2010: 15). Yisak (2010) attributed the low completion rate to various aspects of poverty within students’ households. He reported that poverty forced children to work for their households while attending school, resulting in low achievement, a high drop-out rate, and later entry into school. His long-term study about the transition in children’s aspirations for education and occupations indicated that rural children faced educational barriers at earlier stages than children in urban areas because their aspirations dropped more rapidly than did those of urban children.

2.1.3.1 Historical Background of Literacy in Ethiopia

The concept of adult literacy's functionality was introduced in Ethiopia in the mid-twentieth century. In 1968, a ‘work-oriented adult literacy program’ which was a donor-driven experimental program was commenced (Sandhaas, 2009). Since it was externally motivated and run during the political instability of the country it was not successfully implemented (Fisseha, 2001). As Weldemichael (2018) stated, the work-oriented literacy program of 1968 failed for two reasons: The first one was the problem of language. One language (Amharic language) which was the central government's working language was used in all nations and nationalities irrespective of their needs. The program overlooked the multinational and multilingual issues. The other reason was the problem of the program’s centrality. The facilitators were trained by staff of UNESCO who was considered ‘specialists’. Local facilitators who most likely had a good rapport with the local community did not participate.

After two decades, adult literacy entered into a new phase in Ethiopia as a result of regime replacement. In the late twenty century, a socialist government declared a literacy campaign at the national level (Kenea, 2014). The campaign reached every corner of the country and knocked on almost every door. It was aimed at eradicating adult illiteracy and tackling poverty. Although a significant number of adults, 22 million, were reached through the campaign, illiteracy relapsed as the campaign was top-down and politically motivated (Kenea, 2014; Weldemichael, 2018). During the campaign, adult literacy was used for indoctrination. In 1991, the socialist government system was replaced by a new government system known as “EPRDF”. For almost a decade, no initiative from the new government was taken on adult education as the new leaders wanted to dismantle the institutional memories of the previous adult literacy effort (Kenea, 2014). During that time, the educational and training policy of the country and the Educational Sector Development Programs (ESDPs I & II, 1997 – 2005) did not address adult literacy, however, some NGOs were providing it outside of the general policy context (Weldemichael, 2018). Unlike the first Education Sector development programs (ESDPs), in the third ESDPs (2005/6–2009/10), a Functional adult literacy program was included (MoE, 2010).

Adult literacy and poverty rates remain high in Ethiopia though the country embarked on an adult education program in integrated form since 2010 (MoE, 2010). The IFAE program has targeted people whose ages range from 15 to 60 and who have not had a chance of formal education due to poverty, lack of inclusion equity, and access to the education system. The modality of the program has been in integration form in which different sectors were assumed to work together on seven thematic areas: agriculture, health, income generation, ethics and civics, education, environmental protection, gender, and life skills (MoE, 2016). To address the issues of these themes, literacy skills are used as a tool to make them successful.

2.1.3.2 The Socio-economic and Adult Education in Ethiopian Context

Literacy has a multi-purpose and it has to be integrated with the socio-economic lives of participants and social activities situated in the context of livelihoods. Literacy as a social activity enables adult learners to engage in improving their conditions, which in turn gives meaning to literacy (Kenea, 2014). However, in the Ethiopian context, multilingualism, ideological perspectives, high illiteracy rate, and lack of livelihood diversifications have been

the barriers to literacy progress to contribute to livelihood improvement (Alidouand, 2015). Furthermore, the participatory approach, which is the appropriate framework for adult education program design, is ignored. In Ethiopia, the program is developed without proper consideration of target groups' needs; it depends on centrally imposed did as irrespective of adult education program principles. It fails to mediate and balance the literacy and livelihood integration for rural, urban, and semi-urban contexts of participants. This overlooked approach to designing and developing adult education programs, however, is the means of harmonizing methods and contents in a way that contributes to livelihood (Ianinskaetal, 2012).

The attempt made during the socialist government was not free from challenges as the influence of ideology dominated the professional views. Besides, it was not participatory. The needs and experiences of learners were overlooked. The program was planned centrally irrespective of local needs, language, culture, and livelihoods. The decision to use owns language in literacy was considered to be undue regard. Hence, the misfit of the Integrated Functional Adult Education with the livelihoods of participants' situation might have been brought about by the wrong ideology of adult education.

2.1.4. Vulnerabilities of Girls and Young Women in Ethiopia

2.1.4.1 Education Domain: Girls' Educational Status in Ethiopia

Data from the 2011 WMS show that the literacy rate is 53% for males and 38% for females (CSA, 2012b) – with the overall rate of 47% showing remarkable progress since 2000 when it was a mere 29%. The rate remains low for both males and females, but women are far less literate than men, with differences between rural and urban areas as well as among regional states. This implies that women have limited opportunities to develop or maintain literacy skills, restricting their options in life and compromising the advantages they may have later on. School completion is low for both boys and girls, although it has improved in the past 10 years. Approximately 22% of the population (18% of males and 24% of females) has completed only four years of education and only 35% have completed primary education. A mere 8% have completed secondary education, with rates for women completing higher levels of education falling below the level of men from this level forward.

Gender differences in the net enrolment ratio at primary and secondary levels have narrowed remarkably, particularly at primary and first-cycle secondary levels. In 2011, both gross enrolment and net enrolment were high in the first primary (Grades 1-4), with a gender parity index in favor of girls (CSA, 2012a). However, the proportion of males and females attending first-cycle secondary schools drops remarkably, partly as a result of the low primary completion rate. Available data thus indicate that a large proportion of students do not successfully transition to secondary school.

2.1.4.2 Asset ownership

The Federal Rural Land Administration Law states that the land administration law of a region shall confirm the equal rights of women regarding the use, administration, and control of land as well as concerning transferring and bequeathing holding rights (ECA, 2009). Even though Ethiopian laws give equal property rights to women – including female children, who are allowed to inherit their parents' land rights – tradition and women's low social and economic status limit their ownership of assets. According to the 2011 DHS, men are more likely than women to own a house or land, alone or jointly (26-27% versus 12-13%)(CSA, 2012a).

A national study covering the 11 major ethnic groups of Ethiopia found that the majority of women did not have ownership of land; 58% of men reported being owners of land and joint ownership (both men and women) was at 34%, whereas only 4.1% of women-owned land (Habtmu et al., 2004). A similar pattern was observed regarding house and cattle ownership: 50% joint ownership. Although it would seem that ownership of assets would automatically confer access to them, studies show that women's use and control rights – even when they are owners or joint owners – are severely constrained by traditional norms and patriarchal ideologies (Almaz, 2007; Shambel, 2012).

Legal provisions for women's land and property rights, which focus exclusively on ownership, are therefore insufficient to ensure women can access and benefit from their assets. However, changes in legislation are taking place in the context of increased pressure on land holdings due to population growth and climate change. Ethiopian women's limited access to resources and low decision-making power ultimately hinder their contribution to

the national economy, and, while they are the main actors in the production of food supply and the protection of the environment, they remain among the poorest of the poor.

2.1.4.3 Women's Access to Credit

Statistical reports compiled by the Central Statistical Agency (CSA, 2005) show that urban women run about two-thirds of micro-enterprises and more than a quarter of small-scale manufacturing schemes. Participation in medium- and large-scale manufacturing enterprises is minimal, however, as managing such firms requires huge capital and intensive training, which most women lack.

Rural women often face problems qualifying for loans. Agricultural credit requires a guarantee of repayment; since women do not have ownership of land, equipment, or produce, it is difficult for them to qualify. Credit schemes such as solidarity groups and associations are limited to petty trading and informal sector activities or provide enough only to meet personal social obligations (AfDB, 2004).

2.1.4.4 Unpaid Household Labour and Time Poverty

According to a study conducted among the 11 major ethnic groups of Ethiopia, women in rural areas are involved in rearing children, managing family affairs, weeding, harvesting crops, building family huts/houses, grinding grain, fetching water, collecting firewood, looking after cattle, building grain storage facilities, preparing fields, threshing crops, participating in traditional ceremonies, attending political meetings and others (Habtamu et al., 2004). The study found that women worked on average more than 14 hours a day; in Somali and Afar Regional States this rises to more than 16 hours a day. Women in urban areas are engaged in both household management and remunerative activities; in both rural and urban areas, women were found to be working more hours on average than men.

Women's role as producers is generally unfavorable to their well-being as well as that of their children (Haregewoin & Emebet, 2002).

2.1.5. Household Roles, Decision-making Power and the Status of Women

The ability of women to make decisions regarding the circumstances of their lives is an essential aspect of their empowerment. Women in Ethiopia are mothers, wives, and breadwinners, and having these multiple roles means many of them have little exposure to public life, leadership, and decision-making positions. They traditionally have very little independent power on most individual and family issues.

To assess women's decision-making autonomy, CSA (2012a) collected information on women's participation in three types of household decisions: respondent's health care; making major household purchases; and visits to family or relatives.

Decision-making increases with education, wealth, and employment (CSA, 2012a; Tebekaw, 2011). In addition, women with low decision-making autonomy are more likely to be undernourished (Tebekaw, 2011). Despite the positive legal framework, gender inequalities continue to exist in public services; as already noted, there are very low numbers of women in professional positions and at top decision-making levels (AfDB, 2004). Habtamu et al. (2004) looked at the status of women by asking respondents how women were regarded in their community. A significant proportion (21.7%) of respondents considered the social status of women to be low, and a large number of respondents (25%) stated that women had equal status with men in their community.

2.2. Review of Empirical Studies

Many researchers have studied issues related to the impact of women's education on their livelihood in different areas and different settings. In this study, some of the empirical studies are presented.

Temesgen and Mulatu (2021) conducted an integrated functional adult education program and its contribution to livelihoods in Ethiopia. While adult literacy programs are considered a potentially important vehicle to improve literacy and numeracy skills, their impact on the livelihoods of the rural poor in an integrated approach is less focused. Thus, this research examined the contributions of adult literacy in the Integrated Functional Adult Education (IFAE) program for the enhancement of livelihoods. Embedded mixed method design was

used where data were obtained from structured interviews conducted with 235 participants and semi-structured interviews performed with 24 respondents. The results revealed that the program had positive roles in the family life, economic issues, and social issues of the participants' livelihoods. Therefore, setting up a directive approach for better contributions to the program is imperative.

Tsegaye et al(2021) used cross-sectional data collected in 2020 from farm household heads of 371 respondents with the mixed methodology to investigate the effect of demographic factors in none/off-farm economic activities on gender perspective in Ethiopia. They employed a Logistic regression model to explore the probabilities of household heads' participation in non/off-farm economic activities outside of their farm. The result indicated that age and education level have a positive effect and statistically significant effect on increasing non-farm activities with coefficients of 3.406, and 1.956 respectively, confirming that these variables should be taken into account in policy development to increase their impact on livelihood diversification. Gender has a negative significance on livelihood diversification. FHH has more participants in non-farm economic activities than MHH. Credit access does not contribute to increasing livelihood diversification instead; it contributes to agricultural specialization, not diversification. Surprisingly, family size has insignificant results in non-farm economic activities. The outcome indicated it has its implications for the Ethiopian policy and strategy. The government should give more attention to the progressive aspects of non-farm economic activities to eradicate poverty. Whereas, decreasing its negative impact on poorer households by controlling obstacles of non-farm activities.

Kemal (2021) aimed to examine the role of females' economic participation in household income in the Case of Mizan Aman Town, South Nation Nationality and People's Region, Ethiopia. To achieve this objective both primary and secondary sources of data were collected from 400 sample size using a simple random sampling method. The obtained data were first analyzed using a descriptive method to describe the socio-economic characteristics of women in the study area. Secondly, to identify determinants of women's participation in economic activities and household decision-making process logit model was employed and multiple linear regression analysis was applied to identify factors affecting the level of

women's contribution to household income. The result shows that female participation in economic activities is positively determined by women's training and woman's education level and is negatively affected by the presence of children under five years of age. The contribution of women to household income on average was estimated birr 32,400.50 per annum which was nearly 36.8% of the overall household income. The possible recommendation is government and other respective bodies must encourage women to learn more and more.

Makeda (2017) conducted in Zeway Dugda Woreda, Arsi Zone, and Oromia Regional State to assess the effectiveness of a productive safety net program in improving the livelihoods of women beneficiaries and identifying outstanding challenges related to the program regarding gender mainstreaming and to come up with relevant recommendations to improve gender division of labor in Productive Safety Net Program. A household survey using questionnaires; focus group discussion with PSNP members; and key informant interviews with relevant stakeholders were employed to collect the necessary data. A total of 120 households were selected. Descriptive statistics, correlation analysis, t-tests, and chi-square were used. The results revealed that the productive safety net program has a significant contribution to addressing the existing unfair gender division of labor in the study area while it does not fully address the issue to the extent that the program intended. It can be recommended that gender division of labor issues should be properly considered during design in future interventions of PSNP and other similar programs to address the abovementioned issues in a better way.

Miller et al.(2017) examined the impact of the educational level of household adults on responses to a livestock-based community intervention in rural Nepal The study used Six pair-matched communities in 3 districts of Nepal (Chitwan/Nawalparasi/Nuwakot), which were randomly assigned to receive community development activities via women's self-help groups at baseline or 1 year later. At 6 intervals over 48 months, a 125-item questionnaire addressing family demographics and child health/nutrition was completed in each household, plus child growth monitoring. Results were analyzed about the highest education attained by any woman in the household, the child's mother, men, or any other adult in the household. The results of the study revealed wealth, water/toilet availability, child diet diversity and

growth) all significantly related to adult education. However, notable differences were found comparing the impact of men's and women's education. Percent change in wealth score was significant only in households where women had primary or secondary education (respectively, $p = .0009$ and $p < .0001$). Increased soap use related only to women's education ($p < .0001$). When adjusted for group assignment, baseline income, wealth, and animal scores, higher women's education was significantly associated with increased household wealth ($p < .0001$), better child height-for-age z scores (HAZ, $p = .005$), and improved child diet diversity ($p = .01$). Higher mother's education predicted better child HAZ (primary, $p = .01$, secondary, $p = .03$) and diet diversity (primary, $p = .05$, secondary, $p < .0001$). Higher men's education was significantly associated with household wealth ($p = .02$) and child diet diversity ($p = .04$), but not HAZ; higher education of any household member was associated only with household wealth ($p < .0001$). Moreover, households where the mother's education was better than the best-educated man also were significantly more likely to have children with better HAZ and dietary diversity ($p = .03$, $p < .0001$). Thus, the educational level of women and mothers had the broadest impact on child outcome variables.

Alemayehu (2013) investigated the impact of education on rural women's participation in political and economic activities. Six hundred rural women and 12 gender Activists were selected for this study from three Zones of the Amhara Region, Ethiopia using multi-stage random sampling techniques and purposeful sampling techniques respectively. Questionnaires and interviews were used as instruments of data collection. The findings indicated that as rural women's level of education increases, their involvement in political and economic activities and the possible advantages secured from their participation increase. That is, rural women with primary and secondary school educational experience have claimed significantly higher participation in political and economic affairs and highly benefited from their participation compared to illiterate rural women. Based on the findings of this study, it is recommended that the Ethiopian government introduce and expand integrated and functional adult literacy in rural areas.

2.3. Conceptual Framework

Mugenda, O. & Mugenda, A. (2003) explain Conceptual framework as a network or a plane of interlinked concepts that together provide a comprehensive understanding of a phenomenon or phenomena. The conceptual framework provides the link between the research title, the objectives, the study methodology, and the literature review. The major variables of this study were access and status of rural women's education (independent variable) and rural women's livelihood (dependent variable). Thus, a conceptual framework was developed to illustrate the relationship between the independent variables and the dependent variable described below.

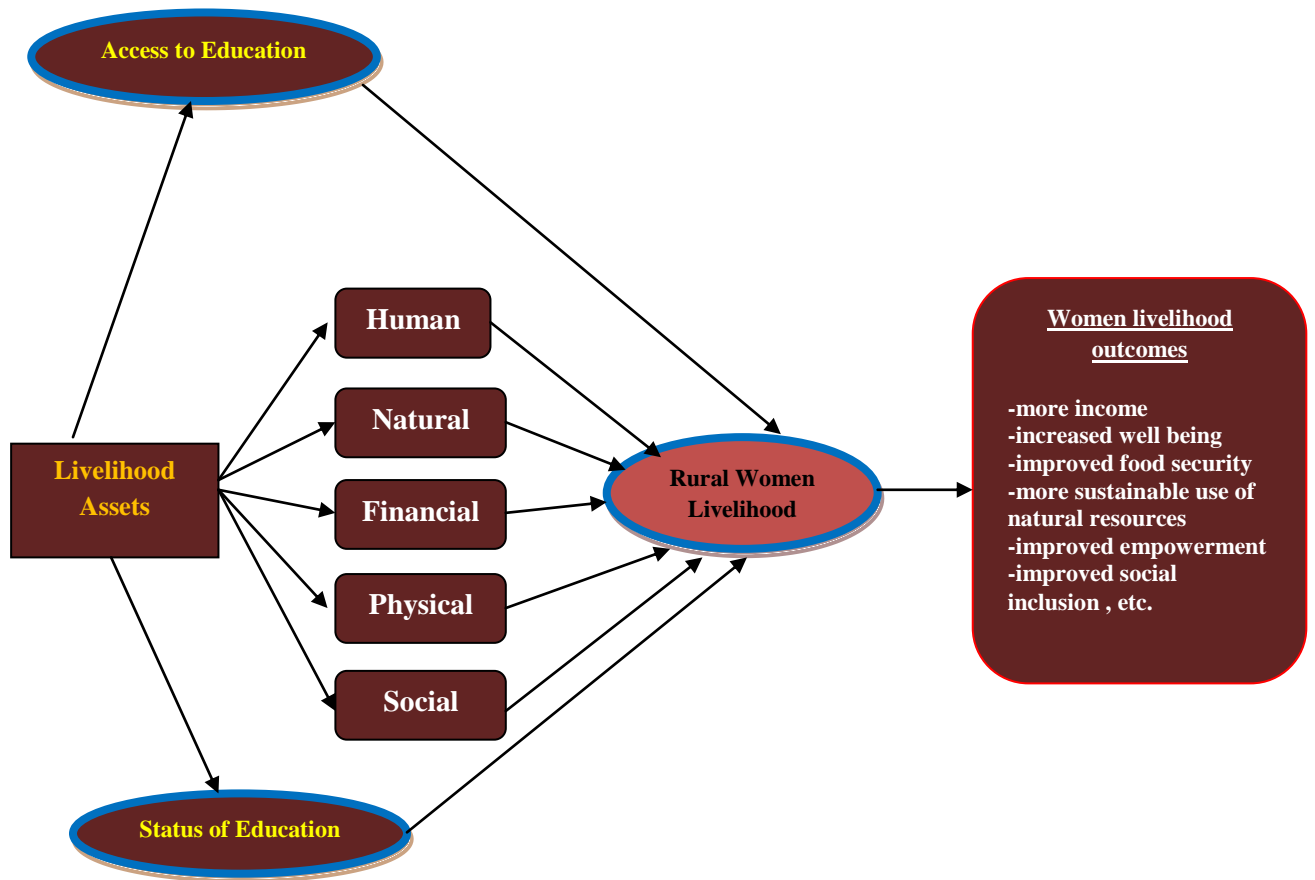


Figure2.2: Conceptual Framework of the Study Variables

Source: Adapted from (Ahmed et al, 2018; Lax & Krug, 2019)

CHAPTER THREE

MATERIALS AND METHODS

3.1. Description of the Study Area

This study was conducted in Kebena Special woreda. found in the Central Ethiopia Regional State .Kebena Special Woreda is a district, also called Special woreda, in Central Regional State of Ethiopia. The district is named after the Kebena people and was part of the former Goro Woreda, which is a part of the Gurage Zone. The Kebena Woreda is bordered to the south by the Wabe River, which separates this district from Kokir Gedebano, Muhor Aklil, Ezha, and Cheha.

According to the Kebena Woreda Plan and Economy Development Office (2022), the total Women's population 79,400 was females; none of the population was urban inhabitants. The majority of the inhabitants identified themselves as Muslim, with 98.52% of the population reporting that belief, while 1.48% practiced Ethiopian Orthodox Christianity.

Kebena Special Woreda is situated at a distance of 155 km from Addis Ababa, the capital of the country, and 430km from Hawassa, the capital of the region. The woreda is geographically situated Latitude 8.93° or 8°56' north and Longitude 38.78° or 38°47' east.

The woreda has twenty 23 rural kebele and has an area of 283.6kms² which is 12% of the zone's land size. The woreda is found between 1600-2300 meters above sea level and it has an average rainfall of 1200-1400mm. It has a Conducive climate of 2% Kola (tropics), 65.2% Dega (temperate), and 98% Woinadega (sub-tropics) which is common to the other Ethiopian region. The economy of the woreda is highly depends on agriculture and trade. Hence the people are known for the production of the most growing cereal crops like beans, beans, chat, and nug in the rural areas.

Their economy is based on subsistence farming. They grow wheat, teff, maize, sorghum, oil seed, Enset (false banana), chat, coffee and fruits. They depend mostly upon rain for their crops, though there is river water that could be used for irrigation.

In Kebena Special woreda, there are 2(two) secondary schools, 18(eighteen) primary schools: from grade 1 up to grade 8 and 3(three) primary schools from grade 1 – 4(from kebena woreda Educational Office 2022)

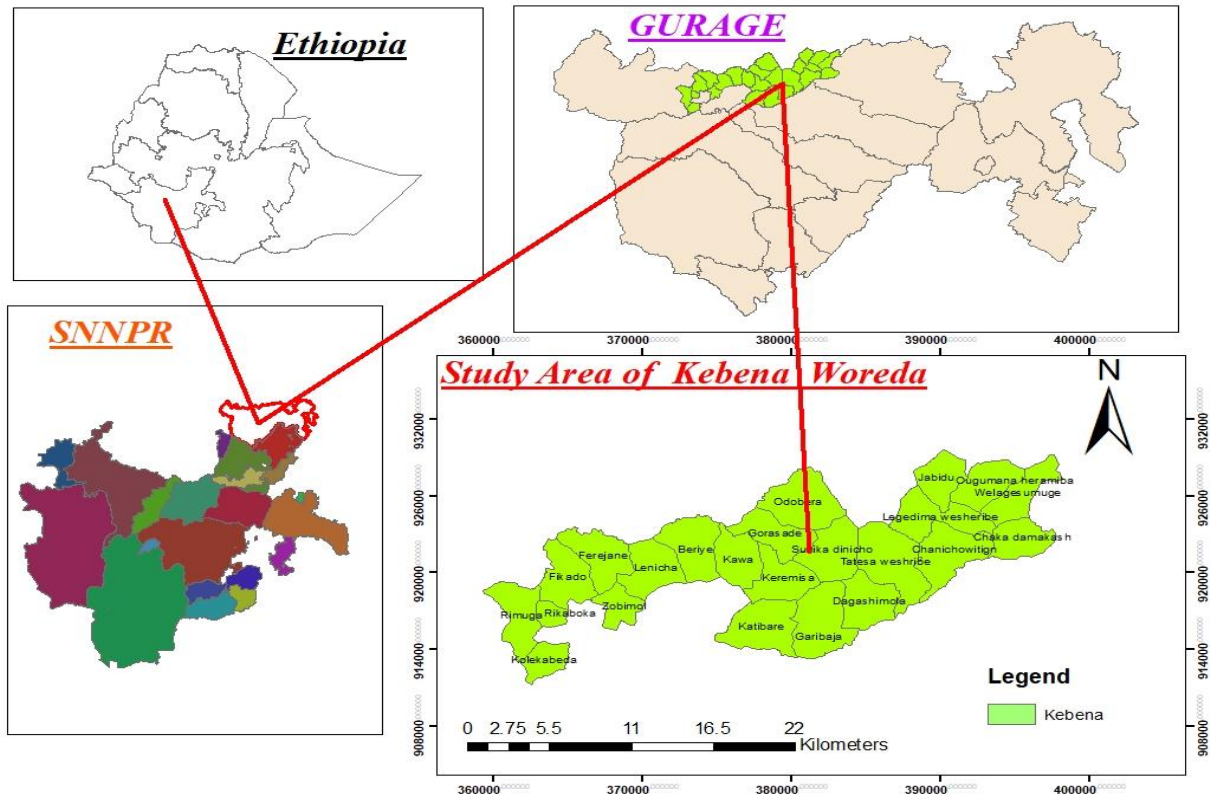


Figure 3.3:Map of Kebena Special Woreda

Source: Gurage Zone Record office (2017)

3.2. Research Design

In this study descriptive and explanatory research design was employed. This is because it is believed that descriptive research design helps to examine the what, where, and when of a phenomenon. Moreover, as Creswell (2006) stated that descriptive research gives a better and deeper understanding of the existing phenomenon, which helps as a fact-finding method with adequate and accurate interpretation of the findings. Furthermore, it also helps to gather data at a particular point in time with the intention of describing the nature of existing condition or identifying standards against which existing conditions can be compared or determined the relationship that exists between specific events.

Regards to explanatory research design; it is one of the correlational research designs that are used in social science research (Creswell, 2012). In explanatory study a situation or problem leads to the explanation of the relationship between variables, i.e., it seeks answers to why and how types of questions by identifying causal factors and outcomes of the target phenomenon (Bhattacharjee, 2012). It also enables the researcher to describe what type of relationship or difference is existed among different variables related to the topic under investigation. For instance, to examine the extent to which two variables co – vary, i.e, where changes in one independent variable is reflected in changes on the dependent variable. More specifically and importantly, it is useful to describe the effect of the independent variables on the outcome variable using the correlation statistical test including the strength and the direction of the relationship between them so as to provide more information about effect relationship. It is also convenient to gather data from a relatively large sample of respondents at one point in time. Finally, it helped to draw conclusions from the statistical test results for the target population. Therefore, by taking the objectives and nature of the study into consideration, the study used descriptive and explanatory research design.

3.3. Research Approach

This study employed a mixed method approach, quantitative and qualitative, through collecting and analyzing both quantitative and qualitative data based on a concurrent embedded strategy of data collection and interpretation procedures. Such a method, according to (Creswell, 2012) helps to minimize the risk of validity, reliability, and subjective issues. By doing so, the study emphasized both quantitative and qualitative inquiry. Mixed approaches can capitalize strength of each approach offset their different weakness and provides a better understanding of the research problem than either approach alone. For this study, there are some rationales for implementing a mixed methods approach. First, using such a method is advantageous to examine the same phenomenon from multiple perspectives and also to allow new or deeper dimensions to emerge. Second, the mixed method approach has benefits that could not be provided by either the quantitative or qualitative approaches when used separately (Creswell, 2003).

3.4. Target Population

The target population of this study was the total population, of which 79,400 are females. However, since the objective of the study was to assess the impact of access to and status of education on livelihood, the main focus lies on women whose ages are greater or equal to 18 years old, and they are 11,850 in number.

3.5. Sampling Techniques and Sample Size Determination

3.5.1. Sampling Techniques

The study used different types of sampling techniques such as purposive, proportionate stratified and simple random. As aforementioned, even though, there are sixteen woredas and seven administrative towns in the Gurage Zone, the researcher intended to use a purposive sampling technique to select Kebena woreda. The reason for this was to study the issue under consideration in deep and to handle the data, the analysis, and interpretations properly.

The second type of sampling technique was proportionate stratified sampling. This was done to set the number of participants from the kebeles in the selected woreda using the proportional allocation rule. The researcher used this technique because it increases the efficiency of estimators of overall population parameters by choice of the strata that are homogeneous over the sampling units within each kebele and also makes the survey easier to administer operationally. In addition, in stratified sampling, the population is proportioned into groups, and sampling is performed separately within each stratum (Wekesa, 2013). This is because, each stratum (kebele) was sampled as an independent sub - sub-population, every unit in a stratum has the same chance of being selected, and adequate representation of minority subgroups of interest has been ensured by stratification. Therefore, each kebele in the selected woreda was taken as a stratum, and based on this; the proportional allocation rule (the most common) was implemented to select participants.

The third type of sampling technique was simple random. This technique was chosen to select the respondents who were already set by proportionate stratified sampling technique. This is because; a simple random sampling technique enables a researcher to generate meaningful insights that can help to gain a deeper understanding of the research phenomena by selecting randomly without bias (Creswell, 2012). Therefore, based on this view simple

random sampling technique was used to select the respondents from each kebele in the woreda.

3.5.2. Sample Size Determination

To determine the sample size, the study used a sampling frame from which the sample size was determined and described in Table 3.1. The study used the ten randomly selected kebeles as a sampling frame to manage the data properly as the result of the large population size of the target population by using simple random sampling techniques.

Table 3.1: Sampling Frame

No	Name of Kebeles	Total number of females whose is 18 & above	Percent
1.	Remuga	552	10.6 %
2.	Fikado	576	11.0 %
3.	Zebimolla	484	9.3 %
4.	Rekaboqa	527	10.1 %
5.	Beriyo	473	9.0 %
6.	Sunkadinicho	541	10.3 %
7.	Odobera	467	8.9 %
8.	Gora sede	511	9.0 %
9.	Kolakabada	537	10.2 %
10	Wesherbe	568	10.8%
Total		5236	100.0 %

Source: Field Survey Data from Kebena woreda Women and Children Affairs, 2022

Sample size from the study population (sample frame, Table 3.1) was determined using the simplified formula for proportion which was developed by Yamane (1967) cited in Ajay and Micah (2014). But, to select participants from each stratum (enterprise), proportional allocation rule was used to obtain better precision.

The formula is: $n = \frac{N}{1 + N(e^2)}$, where n is the sample size, N is the sampling frame of the study, e is the level of precision (5%). Therefore, the sample size for this study was

$$n = \frac{N}{1 + N(e^2)} = \frac{5236}{1 + 5236((0.05)^2)} = \frac{5236}{1 + 13.09} = \frac{5236}{14.09} = 371.61107168 \cong 372$$

Therefore, the sample size of the study in the selected woreda was 372. To determine the number of participants from each of the ten kebeles, the proportional allocation rule was used (Ajay & Micah, 2014): $n_i = \left(\frac{N_i}{N}\right)(n)$, where $i= 1, 2, 3... 10$; $n = 372$; n_i = sample size of participants from each kebeles; N_i = total number of females whose age is greater or equal to 18 in i kebele; and $N=11,850$, the total number of females in the 23 kebeles. Sample determination from each kebele: Sample determination from each kebele was obtained using the proportional allocation rule: From Remuga kebele: where $\frac{n_R}{N_R} = \frac{n}{N}$, n_R = sample size of females from Remuga kebele, N_R = Total number of females in Remuga kebele, and N = Total number of females in the ten kebeles (Sampling frame).

$$\text{Thus, } \frac{n_R}{552} = \frac{372}{5236} \Rightarrow n_R = 552 \times \frac{372}{5236} = \frac{205,344}{5236} = 39.2177 \cong 39$$

Regarding the other samples from all the remaining 9 kebeles, it was obtained applying the proportional allocation rule accordingly and summarized in Table 3.2 given below.

Table 3.2: Study Population and Sample Size Distribution

No	Name of Kebeles	Total number of females (N_i)	Sample from each kebele (n_i)	Percent
1.	Remuga	552	39	10.5
2.	Fikado	576	41	11.0
3.	Zebimolla	484	34	9.1
4.	Rekaboqa	527	37	9.9
5.	Beriyo	473	34	9.1
6.	Sunkadinicho	541	39	10.5
7.	Odobera	467	33	8.8
8.	Gorasede	511	36	9.7
9.	Kolakabada	537	39	10.5
10	Wesherbe	568	40	10.8
Total		5236	372	100.0

Source: Author construct from survey data, 2022

3.6. Data Sources and Types

3.6.1. Primary Sources

Primary sources were collected from the people living in Kebena Special Woreda aged at least 18 from town and rural areas and from the Kebena Special Woreda Women and Children affair Office, Kebena Special Woreda Plan Commission Office, Kebena Special Woreda Agriculture Office, and Kebena Special Woreda Job creation Office. These groups of people have been taken as primary sources because, in one way or another, they were subjects and inevitable for the issue under consideration.

3.6.2. Secondary Sources

The secondary sources are documents like different recorded/written documents such as annual reports in the women and children affairs office. This information is useful for a researcher to prepare for further investigation about what is going on in the subject matter. Bryman (2008) argues that document analysis is important because it provides authentic and meaningful information. Therefore, based on these documents related to the issue were taken as secondary sources of data.

3.7. Data Collection Instruments

Using different types of tools for gathering data helps to get adequate information for the problem in the study. Supporting this idea Creswell (2006) stated that employing multiple methods of data collection helps the researcher to combine the strengths and amend some of the inadequacies when only one method is used independently. Therefore, in the process of data collection, a questionnaire, interview, and document review/analysis were used.

3.7.1. Questionnaire

In this study questionnaire was one of the main tools of data collection. The questionnaire was conducted on the selected women from the ten kebeles. The main reason for using a questionnaire was to obtain factual information, opinions, and attitudes from a large number of subjects within a short period. The questionnaire was prepared for the selected respondents, 384. The questionnaire included both types of items; it consisted of both close-ended and open-ended questions to disclose the free opinions of the respondents. Data from

the respondents were gathered using a questionnaire since it is appropriate to obtain information from a large number of respondents within a short period. The questionnaire has four sections. The first section dealt with the demographic characteristics of the respondents such as sex, age, educational level, marital status, type of family, family size, and religion. The second section was about socio-economic characteristics of the respondents which were source of income and access to resources, access to credit and ability to borrow, and various livelihood activities. The items/questions of the second section were adapted from (Tizita, 2013; Samuel, 2017). The third section was about access and status of women's education and adapted from (Bishaw, 2014); Miller et al., 2017). The fourth section was about the core rural livelihood indicators and adapted from (Andualem & Ebrahim, 2021).

The whole items, in the closed-ended questions from section II up to section IV, were measured using a 1 – 5 point Likert Scale ranging from strongly disagree with its value of 1 point to strongly agree with its value of 5 for each of the study variables extracted from the review literature and prior studies questionnaires which were relevant to the title. Open-ended items were also prepared for respondents for each of the study variables to get any additional ideas/comments.

3.7.2. Interview

Interviewing is essentially a qualitative research methodology (Boateng, 2012). It offers an opportunity to gather information on respondents' attitudes, perceptions, opinions, and experiences systematically and simultaneously for a certain purpose (Babbie, 2011 as cited in Boateng, 2012). Interview guides were also used to solicit information from the respondents – key informants 5 from the Kebena Special Woreda Women and Children affair Office, 5 from the Kebena Special Woreda Education Office, 5 from the Kebena Special Woreda Agriculture Office, and 5 from the Kebena Special Woreda Job Creation Office and 20 from household men (2 from each of the selected ten kebeles). This approach helped the interviewer to have more opportunities to explore beyond the answer and to enter into a discussion with the interviewee to get valid information for cross-checking and supplementing quantitative data.

3.7.3. Document Review

In research, searching for data from documents is important. Documents provide numerous types of data needed in research. A document review aims to elicit preliminary information about the subject being investigated. This information is useful for a researcher to prepare for further investigation about what is going on in the subject matter. Bryman (2008) argues that document analysis is important because it provides authentic and meaningful information. Meanwhile, Yin (2003) considered that document review in a study can reinforce evidence collected from other sources. Therefore, in this study documents were reviewed to see different recorded/written documents from the selected woreda's annual report on the issue under investigation.

3.8. Variables and Measurements

Measurements refer to the formulae or scales to be used in the study. This was done in order to set ways of how each of the variables identified in the study was measured and carried out, because it is one strategy of increasing validity and reliability (Utamu, 2014).

3.8.1. Dependent Variable

The dependent variable for this study was rural women livelihood. The livelihood, either in terms of income or activity participation, is the issue to be measured first in its micro existence where it relates to the individuals residing in different population domains. However, from the point of view of generation of statistics on socio economic characteristics, an individual is identified through the household. Measurement of diversified income of rural household appears to be most relevant for assessing rural livelihood diversification, though it is felt that it may require considerable effort to generate data for this purpose. Therefore, this variable was measured in terms of crop diversification (in terms of area and value of the output), farm sector diversification, and livelihood diversification: employment diversification and income diversification and described by the following items. Providing resources for all household members based on the occupation, adequacy of income for making a living and addressing basic needs, observing the diversification of agricultural products, cooperating with financial institutes (credit service provision) and banks, access to healthy nutrition, enhancing welfare, health of the household members, access to healthcare

centers, qualification of household members to create or have job opportunities, long-term job stability, the stability in providing financially for the family, creating job opportunities, access to water resources, provision of welfare services, farmland income, marketing and selling products, access to communication facilities. These items were measured using a 1 – 5 point Likert scale, where 1 for strongly disagree; 2 for disagree; 3 for undecided; 4 for agree; and 5 for strongly agree. In addition, to measure the extents of the implementation mean score along with standard deviation were used.

3.8.2. Independent Variables

As it has been mentioned in the earlier chapter, the objective of this study was to assess rural women's education access and its effect on their livelihood in Kebena Special Woreda, Central Ethiopia. Based on the literature review, the independent variables of the study were indicated by **personality perspective** such as motivation for development, tendency to stay in rural areas, job-related abilities, self-confidence, innovation and creativity, personal interests, responsibility, risk-taking, motivation for production.

Education related factors and its implementation also the most decisive factors for women livelihood such as familiarity with microcredit activities, access to learning services, employing modern agricultural methods and technologies, trainings for using social media, availability and participation in job creating workshops, trainings for entrepreneurship, developmental and occupational skills, the number of participations in training programs.

Support/Services related factors: Benefit from the family support, provision of government support, cooperating with banks and financial institutions, creating job opportunities for locals, following the requests on time, government's efforts to develop rural activities, cooperation of family members in creating new job opportunities, supporting microcredit organizations for rural women who want to start their own businesses, easy access to agricultural institutions.

Gender related factors: Women's role and share in rural and agricultural activities, the status of women as active economic workforce, appropriate attitude towards women as household heads, social and cultural beliefs about women, their access to certain social services and welfare facilities.

In order to evaluate these variables, a five point Likert scale was used for each item, where 1 for strongly disagree; 2 for disagree; 3 for undecided; 4 for agree; and 5 for strongly agree. In addition, to measure the extents of the implementation mean score along with standard deviation were utilized.

3.8. Method of Data Analysis

In this study, the collected data through the questionnaire was analyzed using descriptive statistics, Pearson correlation coefficient analysis and multiple regression analysis employing SPSS (Statistical Package for Social Sciences) software version 20. Moreover, data gathered through interview was embedded to support the quantitative data analysis result in the discussion section and the content of the answers from the interviewees were analyzed using inductive approach. The overall ways of analyses are presented below.

3.8.1. Quantitative Data Analysis

3.8.1.1 Descriptive Statistics

In this section the data collected through questionnaire was analyzed by using descriptive statistics to determine, describe and analyze the characteristics of respondents in terms of gender, age, academic qualification and means of income using frequency counts and percentage. Mean and standard deviation also implemented to analyze to what extent women education and related factors affected their livelihood in Kebena Special woreda Central Ethiopia Since the main variables in this study were livelihood of women in Kebena woreda and women education and related factors affected their livelihood, the mean scores and standard deviations interpretations are presented as follows.

Interpretation of Mean and Standard Deviation: The interpretation of the items or statements in the closed – ended questionnaire parts accordingly. Based on the 1 – 5 point Likert scales 1 = Strongly Disagree; 2 = Disagree; 3 = Undecided; 4 = Agree; 5 = Strongly Agree, the researcher used the mean scores and grand mean scores values as follows. The mean indicates that to what level of agreement the response of all respondents was approached. As adapted from Dane (2007) and Abanis et al. (2013), the mean score values which is less than or equal to 1.49 interpreted as the factor variable has very low impact;

mean scores values from 1.50 to 2.50 interpreted as low impact; mean scores values ranges from 2.51 to 3.50 as moderate impact; mean scores values ranges from 3.51 to 4.50 as high impact; and mean scores values greater or equal to 4.51 interpreted as very high impact. Similarly, for women livelihood, the mean score values which is less than or equal to 1.49 interpreted as very low livelihood status; mean scores values from 1.50 to 2.50 interpreted as low livelihood status; mean scores values ranges from 2.51 to 3.50 as moderate livelihood status; mean scores values ranges from 3.51 to 4.50 as high livelihood status; and mean scores values greater or equal to 4.51 interpreted as very high livelihood status.

Regards to standard deviation, it measures variation of responses, for a given item, concerning the mean. It shows us the extent of each response is deviated from the mean. Statistically, the smaller the standard deviation, the smaller the variation of individuals' response concerning the mean will be. The overall interpretation is summarized in Table 3.4 below.

Table 3.3: Mean Score Interpretation

No	Variable	Mean Range	Interpretation	Source
1.	Livelihood of women in the rural area of Kebena Special woreda	≤ 1.49	Very low livelihood status	Dane(2007); Abanis et al. (2013)
		1.50 – 2.50	Low livelihood status	
		2.51 – 3.50	Moderate livelihood status	
		3.51 – 4.50	High livelihood status	
		4.51 – 5.00	Very high livelihood status	
2.	Factors related to access and status of education affecting women livelihood in rural area of Kebena Special woreda	1.00 – 1.80	Very low impact	Fanuel(2017); Abdurezak and Tigist (2019)
		1.81 – 2.60	Low impact	
		2.61 – 3.40	Moderate impact	
		3.41 – 4.20	High impact	
		4.21 – 5.00	Very high impact	

Source: Author construct from review literature, 2023

3.8.1.2 One Way ANOVA

Since one of the hypotheses of the study was to test whether was statistically significant difference existed between the different educational statuses of women and the status of their livelihood in the selected kebeles of Kebena woreda or not, – a way ANOVA test was used. The One-way Analysis of Variance (ANOVA) is a procedure for testing the hypothesis that K population means are equal in the indicated variable, where $K > 2$. The One-way ANOVA compares the means of the samples or groups to make inferences about the population

means. To this end, the mean score of all woredas participant women from the selected kebeles for those items in the livelihood was calculated and inferences were drawn. The reason to select this statistical inference was that it is believed to be the most suitable measure to describe whether there was a significant difference existed on the educational and livelihood status of women in the woreda or not.

3.8.1.2.1 Assumptions Underlying the One Way ANOVA

1. **Assumption of Independence:** The observations are random and independent samples from the populations.
2. **Assumption of normality:** The distributions of the populations from which the samples are selected are normal.
3. **Assumption of Homogeneity of variance:** The variances of the distributions in the populations are equal.

3.8.1.2.2 Procedures for one way ANOVA Analysis

The validity of the inferences drawn from one-way ANOVA depends on its assumptions being satisfied. In this regard, for the analysis to be valid and for the one-way ANOVA to explore the existence or non-existence of livelihood differences concerning differences between educational statuses in the selected kebeles in Kebena woreda Gurage Zone, it should satisfy all the assumptions mentioned above. Therefore, the three assumptions were checked before running the one-way ANOVA test using SPSS version 20 software, and the diagnostic test and the evaluation of the assumptions of the test are presented in the next sub-topic.

Hypothesis for One – way ANOVA test:

Null Hypothesis: H_0 : $\mu_{NFE} = \mu_{PE} = \mu_{SE} = \mu_{PE} = \mu_{DIP}$ (i.e. there is no significant difference in the average livelihood scores of women across the five groups (educational level (status))).

Alternative Hypothesis: H_A : The population (women) average livelihood scores of women across the five groups (educational level (status)) are not all equal.

3.8.1.2 Interpretation for the comparison of the mean scores:

To compare whether the mean scores of the five groups (educational status) such as no formal education, primary education (grade 1 – 8), secondary education (grade 9 – 10), preparatory education (grade 11 – 12), and diploma in the average livelihood scores were statistically different from each other or not in the selected kebeles, the study used the following decision rule: comparing the Sig. (probability) i.e. p-value with a priori alpha level ($\alpha = .05$), If $p < \alpha$ reject the null hypothesis of no difference. If $p > \alpha$ retain the null hypothesis of no difference. Therefore, if $p < \alpha$, reject the null hypothesis and conclude that statistically there is a significant difference between the two means. If $p > \alpha$, accept the null hypothesis and conclude that statistically there is no significant difference among the means (Morgan et al., 2004).

3.8.1.3 Regression Analysis

3.8.1.3.1 Model Specification

This section covers the linear regression model specification that was used in the study. It was used to determine the extent of the educational level (status) affecting the livelihood of women in the selected kebeles Kebena Special Woreda in the Central Ethiopia which is described as follows.

Regression analysis was used to explain and estimate the impact of the independent variables on the outcome variable. It can assist in the understanding of how the value of a dependent variable changes when any one of the independent variables is changed, while the other is fixed (Shi, 2013). Generally, regression analysis is used for making statistical inferences and predictions based on sample data and descriptive statistics analysis results (Faraway, 2005). Therefore, the model description is described as follows.

Model specification for access to education:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \varepsilon$$

Where x_1 = equal access to education in your locality, x_2 = sufficient number of schools from primary to preparatory school, x_3 = sufficient training centers available and open for women, x_4 = rule and regulation that grant women the right to education and empower them

implemented efficiently, and x_5 = sufficient access to adult education for women and β_i 's, $i = 0, 1, 3 \dots 5$ are regression coefficients and ϵ = error or residual.

3.8.1.3.2 Model Assumptions

For the regression analysis to be valid and make use of inferences for the target population, it should pass the diagnostic test of the assumptions. The following are assumptions of a standard linear regression model.

Assumptions for Linear Regression Model:

1. **Sample size test:** The sample must be representative of the population.
2. **Normality:** The random errors should follow a normal distribution with mean 0 and variance σ^2 , $\epsilon_i \sim N(0, \sigma^2)$.
3. **Equal variance:** Different response variable have the same variance in their errors, regardless of the values of the predictor variables.
4. **Independence:** This assumes that the errors of the response variable are uncorrelated with each other, which means different errors ϵ_i and ϵ_j , and hence different response y_i and y_j are independent.
5. **Multicollinearity:** Multicollinearity refers to a situation in which two or more explanatory variables in a multiple regression model are highly linearly related, which means there are correlated predictor variables in the regression model. It can also happen if the number of parameters to be estimated is more than the actual data used.

As stated in Dhakal (2019), these assumptions have been tested before running the actual regression analysis and presented in chapter four. The test was done, because standard linear regression models with standard estimation techniques make several assumptions about the predictor variables, the response variables, and their relationship. When these assumptions are not met the results may not be trustworthy and hypothesis tests based on this model may result in over or under-estimation of statistical significance (Abraham & Ledolter, 2006).

3.8.2. Qualitative Data Analysis

The data gathered from respondents through interviews from the stated key informants earlier were summarized by grouping their ideas and described qualitatively in the quantitative data analysis results and interpretation. The content of the collected qualitative data was analyzed using an inductive approach. Using this method, the researcher was enabled to organize the data, break them into manageable units, and then supplemented for quantitative data analysis results

3.9. Data Collection Procedures

As the researcher has aforementioned, to answer the basic research questions through a series of data gathering procedures, the expected relevant data was gathered by using questionnaire, interview and document analysis. These procedures helped the researcher to get accurate and relevant data from the sample units. After having letters of authorization from Wolkite University and Kebena woreda Special women and children affair offices for ethical clearance, the researcher directly took the pilot test on data collection instruments, because checking the validity and reliability of data collecting instruments before providing to the actual study subject is the core to assure the reliability and validity of the data. The questionnaires was piloted to maintain reliability and to evaluate the appropriateness before they administered. Pilot test was administered among 30 women who were not included in the actual data collection process. The purpose of the pilot test was to check whether the investigator and the respondents are properly communicating through the instrument and to add some value to the reliability and validity of the contents in the questionnaire on the base of the feedback obtained. Based on the results obtained, some questions/items were modified by incorporating the inputs obtained from the respondents and checked by the advisor. After all aspects related to pilot test were addressed, the researcher consulted the woreda administrative office for permission. After agreeing with the concerned participants, the researcher introduced the purpose of the research clearly for all respondents of the questionnaires as well as for the interviewees to avoid confusion. Besides these, explanations were provided as required by the respondents. After getting all the corrected items, the questionnaires were administered to the sample women in the selected kebeles and collected according to the schedule. To increase the quality of the responses, the return time was made

short through continuous follow up. Then, the questionnaires were collected and made ready for data analysis. While administering the questionnaire key informant from kebona Special woreda women and children affair office, kebona Special woreda plan commission office, kebona Special woreda Agriculture Office and Kebena Special woreda Job Creation Office were interviewed. Finally, the data was collected through the instruments and analyzed and interpreted accordingly.

3.10. Reliability and Validity of the Instrument

The reliability of an instrument refers to the consistency with which a given outcome occurs, given repeated administrations of the test (Kothari, 2004). Checking the validity and reliability of data-collecting instruments before providing them to the actual study subject is the core of ensuring the quality of the data (Tavakol & Dennick, 2011). The validity of an instrument refers to its ability to measure what it is supposed to measure. To ensure the validity of the instruments, a pilot study was carried out to pre-test the instrument. The pilot study was conducted by selecting 30 women from ten kebeles, but they were not included in the actual data collection. To measure the reliability and internal consistency of the research instrument Cronbach’s alpha was used and the result of the reliability test is shown in Table 3.3 below.

Table 3.4: Reliability Test Results of the items in the Variables

Variable	Description	Cronbach's Alpha	Number of Items
Independent	Access and status of women education	.761	8
Dependent	Rural women livelihood activities	.774	9
	Core rural livelihood indicators	.791	5
Reliability test results of the whole items		.839	22

Source: Author construct from SPSS output, 2023

As it can be seen in the above Table 3.3, the Cronbach alpha value is at least .761. As suggested by Cranach cited by Tech-Hong and Waheed (2011), the reliability coefficients between 0.70 – 0.90 are generally found to be internally consistent. Therefore, the reliability of the instrument is within the acceptable standard. Hence, all items in the questionnaire were suitable and employed to conduct the actual study.

3.11. Ethical Considerations

Taking the severity of the ethical considerations in mind, this study was done with the highest importance placed on ethics, confidentiality, and secrecy. The confidentiality and secrecy of the respondents were emphasized to protect their privacy and dignity. Moreover, permission to administer questionnaires and conduct interviews for research purposes was sought from the relevant authorities. Respondents were informed of privacy and confidentiality. Thus, the researcher presented the purpose of the study and how the confidentiality and anonymity of the participants have been protected; informing them that involvement in the study is voluntary; and is free from any intended risk, and their names and the names of their places were kept anonymous.

CHAPTER FOUR

RESULTS AND DISCUSSION

This part of the study deals with the results of the analyses, interpretations, and discussions of the data gathered from sampled women and key informants from the ten kebeles and four offices in the study area by the objectives of the study. Analyses were made by making use of the data gathered by the three tools; questionnaires, interviews, and document review. Among these data-gathering tools, the main data was collected from the structured questionnaire.

Therefore, in this section based on the responses obtained from the respondents' descriptive statistics, Pearson correlation coefficient analysis, one-way ANOVA, and standard multiple linear regression analysis results on the quantitative data are presented, interpreted, and discussed. In addition, interview and document review results are also discussed to support the quantitative data analysis results.

A total of 372 questionnaires were distributed to the selected women, but 358 questionnaires were retrieved successfully with a 96.2% response rate. In addition from the proposed interviewees, 40; 35 were successfully interviewed. In general, 393 respondents participated in the study, and the overall results of the analyses are presented and discussed below.

4.1. Socio-Demographic Characteristics of the Respondents

Description of the demographic and socio-economic characteristics of the respondents gives some basic information about the sample population. Thus, the following sub-sections show the demographic characteristics such as gender, age, marital status, family type, family size, and religion. The other characteristic is socio-economic characteristics, source of access and income and access to credit and ability to borrow.

4.1.1. Socio - Demographic Characteristics of the Respondents

Table 4.5: Demographic Characteristics of the Respondents

Variables	Category	Frequency	Percent
Gender	Female	358	100
Age	18 – 20 years	61	17.1
	21 – 30 years	134	37.4
	31 – 40 years	93	26.0
	41 – 50 years	38	10.6
	Above 50 years	32	8.9
Marital Status	Single	43	12.0
	Married	219	61.2
	Widowed	55	15.4
	Divorced	41	11.4
Type of family	Male headed	262	73.2
	Female headed	96	26.8
Family size	1 – 3	91	25.4
	4 – 6	241	67.3
	7 – 9	17	4.8
	More than 9	9	2.5
Religion	Orthodox	34	9.5
	Muslim	306	85.4
	Protestant	7	2.0
	Catholic	11	3.1

Source: Author construct from survey data, 2023

According to Table 4.5 responses obtained, out of the total sampled women from the ten selected kebeles of 358, about 61(17.1%) of them were in the age group of less than 21 years old, while 32 (8.9%) were in the age group of greater than 50 years old. However, among the rest relative to the other age groups, the majority of the women 134 (37.4%) were in the age group of 21 – 30 years old, whereas 95 (26.0%) were in the age group of 31 – 40 years old and about 38 (10.6%) were in the age group of 41 – 50 years old. Therefore, from this survey data, it can be observed that the selected women were dominated by youths.

As to the marital status of the selected women, the majority of the respondents 219(61.2%) were married, while 43 (12.0%) were single, however, there were also 55 (15.4%) and 41 (11.4%) widowed and divorced respectively. Concerning the type of the family, the great majority of the respondents 262 (73.2%) families were headed by males, but 96(26.8%) families were headed by women. As to the family size of the respondents, more than two–

thirds of the respondents 241 (67.3%) have 4 – 6 family members, while 91 (25.4%) have 1 – 3 family members.

Finally, regards to religion, the great majority of the participant women 306 (85.4%) were Muslims, but only 34 (9.5%) were Orthodox, 11(3.1%) were Catholic and 7 (2.0%) were Protestant.

4.1.2. Socio – economic Characteristics of the Respondents

Table 4.6: Results of Socio – economic Characteristics of the Respondents

No	Question/Item	Response	Freq/Perc
1.	Source of income and access		
1.1	Source of income	Agriculture	286(79.9%)
		Fruit and Vegetable trading	72(20.1%)
1.2	Land ownership	Yes	316(88.3%)
		No	42(11.7%)
1.3	Land size in hectare	1 hectare	282(90.5%)
		2 hectare	34(9.5%)
		3 hectare	-
		4 hectare	-
1.4	Livestock	Yes	200(55.9)
		No	158(44.1%)
1.5	Usage of livestock	For farm activities only	22(11.0%)
		For farm and household expenditure	169(84.5%)
		For farm & income generating	9(4.5%)
2.	Access to credit and ability to borrow		
2.1	Access to credit	Yes	358(100%)
		No	-
2.2	Use of the opportunity of the credit access	Yes	96(26.8%)
		No	262(73.2%)
2.3	Access to formal or traditional institutes	Relatives	53(55.2%)
		Friends	29(30.2%)
		Microfinance	14(14.6%)
		Other	-
2.4	Livelihood improved	Yes	18(18.8%)
		No	78(81.2%)

Source: Author construct from survey data, 2023

As can be seen in above Table 4.6, the main source of income for the great majority of families 286 (79.9%) use agriculture as the main source of income, whereas 72 (20.1%) of the families use fruits and vegetables trading as the main source of their income. As to the ownership of land as a family, the great majority of the respondents 316 (88.3%) are land

owners, but only 42 (11.7%) are not land owners. Among those land owners, the great majority 282 (89.2%) of them have 1 hectare, while 34 (10.8%) have 2 hectares. Regarding ownership of livestock, more than half of the respondents 200(55.9%) have livestock, while 158 (44.1%) do not have and for those who owned livestock, 169 (84.5%) used their livestock for farming, and household expenditure, 22 (11.0%) used for farm activities and only 9 (4.5%) used for farming and income generating activities. So, from this result, it can be said that the majority of the respondents confined their activities to their livestock hand-to-mouth purposes. This result was confirmed by most of the interviewees of male householders and they pointed out that they have led such activities throughout their lives and nothing changes are seen in their day-to-day activities.

The other basic question raised to participants was about access to credit and the ability to borrow. According to their responses, all the respondents 358 (100%) replied yes. However, based on their responses they were asked whether they make use of such opportunity or not. Accordingly, only 96 (26.8%) used credit access, while nearly three-fourths of the respondents 262 (73.2%) did not use the opportunity. Moreover, those who were in use of the opportunity asked whether the sources the access were formal or traditional institutes, more than half of the respondents 53 (55.2%) got it from their relatives, while 29 (30.2%) got it from their friends and 14 (14.6%) got from microfinance institutes. From this result, it can be safely said that in general most of the respondents did not make use of microfinance institutes. In this regard, the researcher attempted to investigate and cross-check to what extent rural women use credit and loan access in different microfinance institutes found in Wolkite town branches. As the document review observations indicate few numbers of women were using the opportunity. Besides these, the interview was conducted with the Enterprise Office of Kebena Special woreda head and experts about the microfinance institutions in providing credit and loans for rural women to support them to be involved in income-generating activities. As all four experts and the head interviewees stressed even though there are credit and loan providers for rural women in the study area to work in income-generating jobs, their endeavor to engage themselves is hindered by the influence of their religion, especially since lender institutions charge interest, and their desire to work on loans is weak.

Furthermore, based on the responses obtained from those who engaged themselves in access to credit and loan opportunities, they were also asked to what extent their livelihood improved, more than three – a fourth of them 78 (81.2%) claimed that their livelihood did not show any improvement, while the livelihood of 18 (18.8%) of them show improvement and confirmed by most of men households interviewees and pointed out that despite their endeavor no improvement was observed.

Therefore, from the overall results it can be said that the socio-economic activities of most women in the selected kebeles are weak as most of them did not make use of credit and loan opportunities beyond this as their traditional sources of income could not lead them to improve their livelihood.

4.2. Access and Status of Rural Women’s Education

4.2.1. Access to Education for the Rural Women

Table 4.7: Results of Responses on access to education for rural women

No	Question	Responses of the Respondents			
		Yes		No	
		Freq.	Percent	Freq.	Percent
1	Do girls have equal access to education free from cultural, social and economic imposition in your locality/woreda?	88	24.6	270	75.4
2.	Is there sufficient number of schools from primary to college level?	78	21.8	280	78.2
3.	Are there sufficient training centers available and open for women?	67	18.7	291	81.3
4.	Does the rule and regulation that grant women the right to education and empower them implemented efficiently?	81	22.6	277	77.4
5.	Is there sufficient access to adult education for women?	46	12.8	312	87.2

Source: Author construct from SPSS output, 2023

As can be seen in Table 4.7, the respondents were asked to reply on whether they have equal access to education free from cultural, social, and economic imposition, accordingly nearly three – a fourth of the respondents 270(74.5%) responded ‘No’, while 88 (25.4%) said they have the indicated access. In this regard, all interviewees pointed out that even though there is access to education from primary to secondary school, a significant number of women who

completed their secondary school were not in a position to continue their education further due to some reasons. The main reasons why they did not learn were that they were forced to marry against their will; they did not follow their education properly because they engaged in petty trade to support their families economically; they migrated to support their families and themselves economically by working as domestic workers in Wolkite town and different regions of the country; most of the women do not have the right to own land. On the other hand, those who are interested in continuing their education in college/TVET do not have the opportunity to continue and complete their education due to cultural imposition and economic problems. Therefore, from this result, it can be said that not sufficient access education to for most of the rural women in the study area.

As to the availability of a sufficient number of schools from primary to college level, more than three – a fourth of the respondents 280 (78.2%) said ‘No’, while 78 (21.8%) responded with ‘Yes’. In support of this, the information obtained from the Kebena Special woreda education unit indicates that in Kebena woreda, there are 23 primary and 2 secondary schools, and all the 23 kebeles have primary schools, but there is no preparatory school, no TVET college.

In the case of sufficient training centers available and open for women, similar to the above items reply, more than three – a fourth of the respondents 291 (81.3%) responded ‘No’, but 67 (18.7%) said ‘Yes’, besides to this the respondents also asked on ‘Does the rule and regulation that grant women the right to education and empower them implemented efficiently’, accordingly 277 (77.4%) of the respondents said ‘No’ and 81 (22.6%) replied ‘Yes’.

Finally, more than three–fourths of the respondents 312 (87.2%) replied that there was no sufficient access to adult education for women in the study area. In support of this result, almost all of the interviewees from the Kebena woreda education unit stressed that adult education in the woreda is provided for women in a few kebeles.

In general, from the above results, it can be inferred that no sufficient access to education for women in the study area.

4.2.2. Status of Women's Education

Table 4.8: Results of Responses on status of education of the rural women

Educational Status	No formal education	58	16.2
	Primary education(G. 1 – 8)	126	35.2
	Secondary education(G.9 – 10)	94	26.3
	Preparatory education(G.11 – 12)	67	18.7
	Diploma	13	3.6

Source: Author construct from survey data, 2023

Table 4.8 depicts the educational level of the selected women from the ten kebeles, accordingly, the majority of the respondents 126 (35.2%) were in primary education status followed by secondary education status which was about 94 (26.3%), and next to this was preparatory education status about 67 (18.7%), but 58 (16.2%) have no formal education, however, only 13 (3.6%) have diploma. From this survey data responses result, it can be observed that more than three-fourths of the respondents' 278 (77.6%) are at most secondary education status. Therefore, from this result, it can be said that even though there is no problem in the access to education for women in the study area as it has been confirmed from quantitative as well as qualitative data analysis results, the status of education of most of the women in the selected kebeles at the stage the needed great improvement.

Despite the results obtained above, as the information obtained from one of the interviewees from the Women, Youth, and Children Affairs Office few numbers of rural women in Kebena Special woreda took advantage of their educational opportunities and completed their studies at the diploma and degree level. One woman was represented in the House of People's Representatives at the federal level, one woman was represented in the House of People's Representatives at the regional level, and one woman was represented by the Speaker of the Zonal Council at the zonal level. At the leadership level, when six women are the head of the government office, it has been confirmed through research that 108 women have graduated with diplomas and degrees and are serving their woredas in various government offices. Therefore, from the result, it can be said that the status of rural women in the study area is low.

4.3. Rural Women Livelihood

Since one of the objectives of the study was to assess the livelihood of rural women in Kebena Special woreda, the results of the analysis along with the discussion are presented as follows.

Table 4.9: Results of the Responses on Rural Women’s Various Livelihood Activities

No	Item		SD	DA	U	A	SA	Mean	St.d	
1.	Women are actively participated and engaged in making their own association like ‘Ekub’, ‘Mahiber’, etc. to earn money.	F	-	257	38	63	-	2.46	.776	
		P	-	71.8	10.6	17.6	-			
2.	Women are carried out forestation activities as a means of income generation.	F	29	217	54	58	-	2.39	.853	
		P	8.1	60.6	15.1	16.2	-			
3.	Women become beneficiaries from extension services such as agriculture and health.	F	5	268	13	72	-	2.42	.822	
		P	1.4	71.9	3.6	20.1	-			
4.	Women are participated actively in farming activities such as land preparation, ploughing, weeding, threshing, etc.	F	12	259	27	60	-	2.38	.799	
		P	3.4	72.3	7.5	16.8				
5.	Women earn money from off - farm activities such as petty trade, fire wood selling, selling animal fodder, selling fruit and vegetables, etc.	F	12	284	15	47	-	2.27	.727	
		P	3.4	79.3	4.2	13.1	-			
6.	There is NGOs and government organization that supports women to enhance their livelihood.	F	12	249	33	64	-	2.42	.818	
		P	3.4	69.6	9.2	17.9	-			
7.	Women are free to involve themselves in income generating activities and use their money and resources.	F	-	276	11	71	-	2.43	.802	
		P	-	77.1	3.1	19.8	-			
8	There is a discrimination against females in the provision of different support from different institutions.	F	-	244	34	80	-	2.54	.835	
		P	-	68.2	9.5	22.3	-			
9	Socio-political condition of your area is free from social and ethnic conflicts.	F	-	277	18	63	-	2.40	.771	
		P	-	77.4	5.0	17.6	-			
10	In respect of livelihood assets, there is access to capitals, land tenure and pasture access arrangements for women.	F	17	257	28	56	-	2.34	.797	
		P	4.7	71.8	7.8	15.6	-			
11	Sufficiency and diversity of food products are available in markets and households.	F	11	265	35	47	-	2.33	.739	
		P	3.1	74.0	9.8	13.1	-			
n = 358		Grand Mean	F	98	2.853	306	681		2.40	.305
	P		2.5	72.4	7.8	17.3				

Source: Author construct from SPSS output, 2023

As can be seen in Table 4.9, the respondents were asked to rate their responses on ‘Women are actively participated and engaged in making their association like ‘Ekub’, ‘Mahiber’, etc. to earn money’ So, according to the survey data analysis from the total respondents showed that more than two - thirds of the participants 257 (71.8.8%) disagreed to the stated item,

whereas 38 (10.6%) and 63 (17.6%) were undecided and agreed respectively. However, the mean score of the whole responses was 2.46 with a standard deviation of .776. This indicated low livelihood-related activities and implied that most women did not actively participate and engage in making their associations like ‘Ekub’, ‘Mahiber’, etc. to earn money in the selected kebeles of Kebena Special woreda. Therefore, from this result, it can be inferred that most of the women in the study area are weak in making their traditional associations. But in contrast to this most women in selected areas of Afar and Oromia Regions have increased access to productive resources (land and agricultural inputs) through technical assistance to individual women and women’s associations to benefit from the revolving fund that has been established alongside technical support on basic business and entrepreneurship skills as the result of the joint program on: “Accelerating Progress towards the Economic Empowerment of Rural Women (Unlocking the Potential of Rural Women in Ethiopia, 2017).

As to item two, similar to the above item, respondents were asked to rate their responses on ‘Women carried out forestation activities as a means of income generation.’ Accordingly, more than two-thirds of the participants 246 (68.7%) disagreed or strongly disagreed, while 58 (16.2%) and 54 (15.1%) were agreed and undecided respectively to the stated item. These responses’ mean score was 2.39 with a standard deviation of .853 indicating low livelihood activities and implying that most of the women in the selected kebeles do not carry out forestation activities as a means of income generation as needed. In this regard, despite women’s active participation in agricultural production and processing and marketing of food products, the studies show that women’s identity as farmers faces a problem of recognition in agricultural-related activities like the mentioned which is supported by the finding of Tizita (2013) who conducted her study on Female-Headed Households and their livelihood in Bati woreda South Wollo, Amhara Regional State of Ethiopia.

Item three depicted in Table 4.9, respondents were asked to rate their responses on ‘Women become beneficiaries from extension services such as agriculture and health.’ Accordingly, the result shows more than two-thirds of the respondents 268 (71.8%) disagreed, whereas 72 (20.1%) and 13 (3.6%) of the respondents were agreed and undecided respectively to the stated statement. These responses’ mean score was 2.42 with a standard deviation of .822 indicating low livelihood-related activities and implying that most of the women in the

selected kebeles are not beneficiaries of extension services such as agriculture and health. In this regard, even though in kebena woreda some governmental institutions have close contact with farmers. Institutions like peasant associations, kebeles, and agricultural development agents are some of them. In addition, farming in the study area needs the involvement or help of such institutions to achieve the intended purposes, the results obtained from the interview sessions with the Kebena Special woreda Agriculture Office head, expert, and DA confirmed that most of the rural women in the woreda are being supported by the woredas' agriculture experts and DAs to ensure their food security by working in the development of female breeding packages and backyard gardens, but the support was not enough as the result in most of the women no improvement in their livelihood were observed. Furthermore, one of the elderly men households replied that:

“The development agents are young and cooperative people; they mostly come directly to our farm area and teach us new technology. But there are other issues beyond land management, for instance, to be beneficiary of savings and credit we have to follow information and fulfill the requirement. For this, we should be somehow closer to the kebele. Especially when it is not the pick time of the season we visit the kebele regularly, but our counterparts, women are not involved in such activities due to workload at home and cultural impacts. Therefore, they cannot benefit from the extension services fully.” Based on this result, the finding of this study is supported by Makeda (2017) who conducted a study on assessing the effectiveness of the Productive Safety Net Program in improving the livelihoods of women beneficiaries in Zeway Dugda Woreda, Arsi Zone, Oromia Regional State and found out that the productive safety net program has a significant contribution to address the existing unfair gender division of labor in the study area while it does not fully address the issue to the extent that the program intended.

Regards to the fourth item, presents the responses of the participants to the statement ‘Women participated actively in farming activities such as land preparation, plowing, weeding, threshing, etc.’ according to the analysis result, similar to the above item, three – fourth of the respondents 271 (75.7%) responded with strongly disagreed or disagreed with the stated statement, whereas 60 (16.8%) and 27 (7.5%) of the respondents agreed and undecided, but when the overall responses were considered to decide the opinion of the

participants towards the stated item the mean and standard deviation were calculated and resulted in the mean score of 2.38 with standard deviation .799 indicating low in livelihood related activities - farming and implied that most of the women are not participating actively in farming activities such as land preparation, plowing, weeding, threshing, etc. as required/expected. Despite, the type of geographical difference, the finding of this study is in line with Gurmu (2018) who explored the major roles women play in livelihood security among Ethiopian Somali Pastoral and agro-pastoral communities in selected two districts and found the role of women in crop production appeared to be minimal (confined to the feeding of those who work on farm) due to cultural outlook that sees women to be weaker than men. Petty trading of a wide range of commodities including livestock and livestock products is the major supplementary activity that enables the diversification of livelihoods of pastoral and agro-pastoral women. Therefore, from this result, it can be inferred that majority of the women in the selected kebeles are not involved in farming activities.

As to item five depicted in Table 4.9, the result of the responses of the participants in the selected ten kebeles of Kebena Special woreda on the statement ‘Women earn money from off-farm activities such as petty trade, firewood selling, animal fodder selling, selling fruit and vegetables, etc.’ Similar to the above items of the same table, more than three - a fourth of the respondents 296 (82.7%) answered strongly disagreed or disagreed; while 47 (13.1%) and 15(4.25) of the participants responded agree and undecided respectively on the stated item. However, the mean score of these responses was 2.27 with a standard deviation of .727. This indicated low livelihood-related activities and implied that most of the women did not earn enough money from off-farm activities such as petty trade, fuel wood sale, selling animal fodder, selling fruit and vegetables, etc. In this regard, the results obtained from almost all the interviewee experts from the Kebena Special Woreda Enterprise Office revealed that although the non-farm activity creates new social space that connects different spaces, these spaces provide very different contexts for women, especially for those women household heads. For instance, it has been seen that those women-headed households who have children in other towns or countries are found to have better diversified their means of livelihood. They manage to get a good amount of money or gifts in different forms or get a chance to open a mini market ‘suk’ in their village. On the other hand, the availability of male members in the female-headed household has also served as a means of additional

income (economic capital) by lending labor to others. In this regard, social capital that emanates from familial relations has been found to help female-headed households to diversify their livelihood. Relying on close relatives or family members is therefore helpful as it provides economic support while searching for means of livelihood. However, one of the interviewees added that such cases are few and confined to limited areas in the woreda because the majority of women household heads felt stigmatized by society for their low-income earning capacity and lack of land or male labor. Many internalize and get used to the stigma, resulting in low self-esteem and their feeling incapable of achieving a higher social position. They are hesitant to get sustainable means of livelihood; and feel less confident because of their poor symbolic and social capital and possibilities. In addition, most of the interviewee male households supported the results of the quantitative analysis as well as the replies obtained from the woreda enterprise office participants and one of the participants stressed

“There are women-headed families who are neighbors and who don’t have formal education or skill to be engaged in different off-farming activities, but engaged in collecting firewood and selling animal fodder to diversify their livelihood. The amount of production from their land is very small, but most of the communities are not happy with what they are doing, they always try to advise them to stop collecting wood. In our community farming is the only respected and income-generating activity but I think they know why they are engaged in wood collecting, their income from the farm is very small.” Therefore, even though livelihoods include both economic and non-economic activities and the need to bring together a variety of income, subsistence, and family and community-based activities to sustain a household, from the overall results it can be inferred that in most of the selected kebeles, women are not as such earn money from off-farm activities to sustain their livelihood.

Item six shows the responses of the respondents to the statement; ‘There are NGOs and government organization that supports women to enhance their livelihood.’ so, the result of the analysis revealed that nearly three – a fourth of the respondents 261(73.0%) responded with strongly disagree or disagree; while 64 (17.9%) and 33 (9.2%) responded agree and undecided respectively to the stated item. However, the mean of these responses was 2.42

with a standard deviation of .818. On the other hand, the same question was also raised for interview participants, the result of the interview sessions with the Kebena woreda agriculture office head, experts, and DA indicated that no government organizations and NGOs supported almost in the last five years in particular for women to provide special support in various agricultural activities, for instance: provision of trainings on control and management of local household food reserves, cropping, small-scale irrigation practices and rearing and fattening of livestock. The same question was also raised for male householder's interviewees and the majority of them responded that even though there are no government institutions that could provide training, no training has ever been given sufficiently for the last ten years. This implied that most of the women are not in a position to enhance their livelihood due to insufficient support from NGOs and government organizations. Therefore, from these results, it can be said that governmental and non – non-governmental institutions are not providing training to help rural women enhance their abilities and to engage them in income-generating activities. However, in contrast to this, the livelihood of most rural women has improved in selected areas of the Afar and Oromia Region as the result of support by the joint program: “Accelerating Progress towards the Economic Empowerment of Rural Women (RWEEJP) (Unlocking the Potential of Rural Women in Ethiopia, 2017).

Item seven presents the responses of the participants to the statement ‘Women are free to involve themselves in income-generating activities and use their money and resources.’ according to the analysis result, more than three – a fourth of the respondents 276 (77.1%) disagreed with the stated statement, whereas 71 (19.8%) and 11(3.1%) of the respondents agreed and undecided to the stated item, but when the overall responses were considered to decide the opinion of the participants towards the stated item the mean score and standard deviation were calculated and resulted in 2.43 with standard deviation .802 indicating low in livelihood related activities and implying that the most of the women were not free to involve themselves in income generating activities and use their money and resources in the selected kebeles.

In item eight, which was intended to get the perception of the selected participants towards the item; ‘There is a discrimination against females in the provision of different support from different institutions.’ So, the result of the analysis revealed more than two-thirds of the

respondents 244 (68.2%) responded disagree, while 80 (22.3%) and 34 (9.5%) of the participants were agreed and undecided about the stated item, however, the mean score of these responses was 2.54 with standard deviation .835 indicating to some extent the moderate practice of the stated item in most of the selected kebeles. So, from this result, it can be said that the provision of support by different institutions was fair for men and women.

Item nine, more than three-fourths of the respondents 277 (77.4%) disagreed with the statement ‘Socio-political condition of your area is free from social and ethnic conflicts.’ But 63 (17.6%) and 18 (5.0%) were agreed and undecided. However, the mean value of these responses was 2.40 with a standard deviation of .771 indicating the implementation of the stated item was at a low level. From this result, it can be inferred that in most of the selected kebeles, the socio-political condition of the study area is not free from social and ethnic conflicts.

Regards to item ten, the respondents were asked to rate their view on ‘In respect of livelihood assets, there is access to capitals, land tenure and pasture access arrangements for women.’ More than three-fourths of the respondents 2274(76.5%) strongly disagreed or disagreed, whereas 56 (15.6%) and 28 (7.8%) agreed and undecided respectively to the stated item. However, the mean score of these responses was 2.34 with a standard deviation of .797 indicating low access to the stated livelihood assets. Therefore, from this result, it can be inferred that in most of the selected kebeles no access to capital, land tenure, and pasture access arrangements for women.

As to item eleven, almost three – fourth of the respondents 266 (74.5%) strongly disagreed or disagreed, whereas 47 (13.1%) and 35 (9.8%) were agreed and undecided about the statement ‘Sufficiency and diversity of food products are available in markets and households.’ In line with those ratings the mean score value with 2.33 which is minimum with less than one standard deviation of .739. This implies the unavailability of sufficient and diversified food products in markets as well as in households. The finding of this study concurs with Nahusenay and Tesfaye (2015) who conducted their study on the roles of rural women in livelihood and sustainable food security in Ethiopia: a case Study from Delanta Dawunt District, North Wollo Zone and found that women have also limited access of agricultural products, credit facilities, skill training, education, extension services, and information.

In general, considering the respondent's views on the overall eleven items on rural women's livelihood activities, nearly three – a fourth of the respondents 74.9% strongly disagreed or disagreed, while 17.3% were agreed about the stated items, these responses were further confirmed by the grand mean 2.40 with standard deviation .305 which is less than one indicates the low-level status in carrying out livelihood related activities by most of the women in the selected kebeles. Therefore, from this result, it can be inferred that most of the women in the selected ten kebeles' livelihood were at low-level status. Moreover, the major livelihood activities of most women in Kebena woreda are petty trade activities like vegetables and fruits. In general, the finding of this study is supported by Abera et al.(2021) who conducted their study on determinants of women's participation in income-generating activities: evidence from Kedida Gamela, one of the Woreda of Kembata Tembaro Zone of Central Regional State of Ethiopia and found out women in the study area are not allowed by their husbands to participate in high-income earning activities. They are considered a housewife and the only husband is expected to participate in high income-generating activities due to the local customs. As a result, some women participated in small business activities like livestock product sales, vegetable and fruit sell, poultry, petty trade, hairdressing, and wage labor. In the study area, women's participation in the income-generating activity was determined by age, husband's education, women's education, family size, land size, market distance, livestock holding, and access to credit.

4.4. Effects of Access and Status of rural women education on their livelihood

4.4.1. Descriptive Analysis

Table 4.10: Effects of access and status of rural women education on their livelihood

No	Item		S D	DA	U	A	SA	Mean	St.d
1	Unequal access to education for women in your locality affected your livelihood.	F	-	11	32	189	126	4.20	.725
		P	-	3.1	8.9	52.8	35.2		
2.	Women’s lack of formal education create problem in getting loan and credit.	F	-	23	48	204	83	3.97	.790
		P	-	6.4	13.4	57.0	23.2		
3.	Your level of education affected you in getting possession of resources.	F	-	20	79	189	70	3.86	.789
		P	-	5.6	22.1	52.8	19.6		
4.	Your level of education affected you in hiring at different government sectors.	F	-	31	70	188	69	3.82	.840
		P	-	8.7	19.6	52.5	19.3		
5.	Your level of education affected you in involving in different income generating activities.	F	-	36	72	191	59	3.76	.845
		P	-	10.1	20.1	53.4	16.5		
6.	Efforts are not made efficiently by political and administrative bodies especially that of woman's affairs office to increase girls’ participation in education.	F	-	29	57	187	85	3.92	.846
		P	-	8.1	15.9	52.2	23.7		
7.	Your level of education affected you to become entrepreneur.	F	-	22	54	202	80	3.95	.787
		P	-	6.1	15.1	56.4	22.3		
8	Rural women unequal utilization of education and equal participation affected their economic activities.	F	-	24	47	218	69	3.93	.767
		P	-	6.7	13.1	60.9	19.3		
9	Educational status of women affected their decision – making in utilizing resources.	F	-	19	48	166	125	4.11	.828
		P	-	5.3	13.4	46.4	34.9		
n = 358	Grand Mean	F	-	215	507	1734	766	3.95	.429
		P	-	6.7	15.7	53.8	23.8		

Source: Author construct from SPSS output, 2023

As described in Table 4.10, the great majority 315(88.0%) of the respondents agreed or strongly agreed that unequal access to education for women in their locality affected their livelihood whereas only 11(3.1%) of them disagreed and 32 (8.9%) were undecided to the given statement. However, the mean score of their responses was 4.20 with a standard deviation of .725 indicating a high impact of the indicated item on most of the women's livelihood in the selected kebeles of Kebena Special woreda. In this regard, the question is: among the total number of rural women, how many have access to education? How do you describe their status? Was raised to the Kebena Special Woreda Education Office head,

accordingly, he pointed out that since the mercy of the 2000s, all schools in the Kebena Woreda rural area have been opened and education has been organized, but the participation of female students is small for different reasons. For example, the community's understanding of educating a girl is not good; rather, most families force their daughters to marriage by limiting them to primary education and even without education; sending them to the city for the benefit of their families economically influenced women not to be equal to men in their education. Moreover, the Kebena woreda Women and Children Affairs interview participants also confirmed that in the current situation, 100% of the woreda females' are the beneficiaries of educational opportunities, but they stop without completing school and are forced to discontinue due to marriage and economic hardship.

Regards to the second item, the respondents were asked to what extent women's lack of formal education creates problems in getting loans and credit, accordingly more than three – a fourth of the respondents 287 (80.2%) agreed or strongly agreed, but 48 (13.4%) and 23 (6.4%) were undecided and disagreed to the stated item. On the other hand, the mean score of the overall responses of the participants was 3.97 with a standard deviation of .790 showing the high impact of the stated item on most women's livelihood in the selected kebeles. The response of the Kebena Special woreda Enterprise Office head confirmed that while he was supervising some kebeles to assess the capabilities and willingness of women to get loans and credit to change their livelihood most of the women hesitated due to their lack of formal education and believed that they would not be successful if they engage in livelihood diversification activities.

Regarding the level of education affecting women in getting possession of resources, similar to the above responses nearly three – a fourth of the respondents 259(72.4%) agreed or strongly agreed, whereas 20(5.6%) and 70(22.1%) disagreed and undecided to the stated item. However, to decide the extent of the impact mean score of the whole responses was calculated and resulted in 3.86 with a standard deviation of .789 indicating high impact. Therefore, from this result, it can be said that most of the women in the selected kebeles are not in a position to get possession of resources due to their level of education.

As to item four of Table 4.10, among the respondents, three - fourth of them 257(71.8%) agreed or strongly agreed that women's level of education affected them in hiring at different

government sectors, while 31 (8.7%) and 70 (19.6%) were disagreed and undecided to the stated item. However, the mean value of the whole responses was 3.82 with a standard deviation of .840 indicating high impact. In this regard, the result of the interview with the Women and Children Affairs head pointed out that: “A combination of cultural factors and a lack of female role models hurt girls’ motivation in school. Moreover, lack of female employment opportunities serves as a disincentive to female education.” Therefore, from this result, it can be said that most of the women in the selected kebeles are hindered by their level of education in hiring at different government sectors.

With regards to item five, the majority of the respondents 250(69.9%) agreed or strongly agreed that women’s level of education affected their involvement in different income-generating activities, whereas 36 (10.1%) and 72 (20.1%) disagreed and were undecided to the stated item respectively. However, the mean score of these responses was 3.76 with a standard deviation of .845 indicating a high impact of the stated item.

As to item six, respondents were also requested to what extent efforts were not made efficiently by political and administrative bodies especially that of the women's affairs office to increase girls’ participation in education. Accordingly, three-fourths of the respondents 272(75.9%) agreed or strongly agreed, whereas 29 (8.1%) and 57 (15.9%) were disagreed and undecided about the stated statement respectively. On the other hand, the mean score of these responses was 3.92 with a standard deviation of .846 indicating a high impact of the stated item on most of the women in the selected kebeles of Kebena Special woreda.

As to item seven, the respondents were asked to what extent their level of education affected them to become entrepreneurs. Accordingly to the survey data analysis result more – than three-fourths of the respondents 282(78.7%) agreed or strongly agreed, while 22 (6.1%) and 54 (15.1%) were disagreed and undecided to the stated statement respectively. However, the mean score of the entire responses was 3.95 with a standard deviation of .787 indicating a high impact of the stated item.

As to item eight of Table 4.10, similar to the above item, more than three - a fourth of the respondents 287 (80.2%) agreed or strongly agreed that rural women have unequal utilization of education and equal participation affected their economic activities, while 24 (6.7%) and

47 (13.1%) were disagreed and undecided to the stated statement respectively. However, the mean score value for the whole responses was 3.93 with a standard deviation of .767 shows a high impact. This shows that most of the selected women do not have equal utilization and participation in economic activities. On the other hand, the interviewees from the Kebena woreda education office and women and children affairs office were also asked to describe and elaborate on the basic factor(s) that could hinder rural women from equal utilization of education and equal participation in economic activities. Most of the participants replied that there are different factors such as early marriage, more work and responsibilities at home and to some extent cultural impact as most of the people believed that rather than educating girls/women it is better to lead them to marry and to help their families. In respect of this finding, the result is supported by the finding of the study by Kabeer (2018) who reviewed evidence over the life course on gender, livelihood capabilities, and women's economic empowerment and found out gender differentiates how young people experience adolescence. It is a time when girls are considerably disadvantaged compared to boys, as their educational opportunities are cut short so that they can do even more work at home or marry early and begin bearing children – all of which restricts their already limited social networks and economic capabilities.

Finally, in item nine, more than three-fourths of the respondents 291 (81.3%) agreed or strongly agreed with the stated item, while 19 (5.3%) and 48 (13.4%) were disagreed and undecided about the stated item. However, the mean value of 4.11 with a standard deviation of .828 indicates a high impact of the educational status of women in affecting their decision-making in utilizing resources.

In general, considering the respondents' view on the overall nine items of access and status of women's education and their impacts, more than three – a fourth of the respondents 77.6% agreed or strongly agreed, while 6.7% and 15.7% disagreed and undecided to the stated items and these responses were further confirmed by the grand mean 3.95 with standard deviation .429 which is less than one indicates high impacts of access and impacts of education on livelihood of women.

4.4.2. Regression Analysis Results

4.4.2.1 Effects of Access to Education

4.4.2.1.1 Model Summary: capacity of access to education in explaining the Livelihood of Women's

Table 4.11: Capacity of access to education in explaining the livelihood of women's

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.895 ^a	.800	.797	.11247
a. Predictors: (Constant), SATAEFW, STCAAOFW, SNSs, SNSFPTC, EATEFFCE, RRGWREETE.				
b. Dependent Variable: Rural Women Livelihood				

Source: SPSS output, 2023

In above Table 4.11, the R – R-value for the model indicates the multiple correlations which are the equivalent of Pearson's r rather than representing the magnitude and direction of the relationship between two variables. It shows the strength of the relationship between the outcome variable (dependent) and the independent variables as a whole predicted by the model. It tells us how well the model predicts the outcome. Therefore, the numerical value R = .895 indicates the existence of a strong positive relationship between the dependent variable – RWL (Rural Women's Livelihood) and the predictor variable – access to education for rural women in the study area.

The R square value, .800 indicates that the percentage of the variation of the dependent variable was directly attributable to the independent variables. Therefore, as (Pallant, 2005) indicated, the explaining capacity of the RWL model with the indicated independent variables was 80.0%, the remaining 20.0% of the variation was explained by other variables which were not included in this study.

The Adjusted R square is the most useful measurement of the success of a model, which is better than the R square value. Because the R square value tends to somewhat overestimate the success of the model when applied to the real world, and also the Adjusted R square value takes into account the number of variables in the model and the number of observations, participants – sampled women of Kebena woreda, upon which the model was

based on (Diem & Puente, 2012). Therefore, the adjusted R square value for the RWL model was .797. So, it can be said that the five predictors have accounted for 79.7% of the variance in explaining the RWL in the selected kebeles of Kebena woreda.

In general, from the above results it can be said that access to education for rural women is decisive for the overall rural livelihood activities of women in the study area.

4.4.2.1.2 Hypothesis Test Results on the effect of access to education for Rural Women on their Livelihood

As aforementioned, one of the objectives of the study was to assess the effect of access to education for rural women on their livelihood. Therefore, the stated hypothesis, given below, was tested presented, and discussed about the prior research findings as follows.

H_{o1} : Access to education for rural women has no positive and significant effect on their livelihood in Kebena Special woreda.

H_{A1} : Access to education for rural women has a positive and significant effect on their livelihood in Kebena Special woreda.

Table 4.12: Effects of access to education for women on their livelihood

Model	Coefficients				
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.057	.101		-.563	.574
equal access to education free from cultural, social and economic imposition	.239	.030	.268	8.054	.000
sufficient number of schools from primary to college level	.120	.028	.128	4.251	.000
sufficient training centers available and open for women	.212	.028	.231	7.605	.000
Rule and regulation that grant women the right to education and empower them implemented efficiently.	.220	.033	.246	6.759	.000
sufficient access to adult education for women	.225	.033	.236	6.748	.000

a. Dependent Variable: Rural Women Livelihood

Source: SPSS output, 2023

According to the result obtained from regression analysis, in Table 4.12 above, the unstandardized beta coefficient, t - value, and p – the value of equal access to education free from cultural, social, and economic imposition; a sufficient number of schools from primary to college level; sufficient training centers available and open for women; rule and regulation that grant women the right to education and empower them implemented efficiently; and sufficient access to adult education for women are .239; .120; .212; 220; and .225 respectively shows for everyone – unit increase in the indicated five independent variables, the livelihood of most of the women in the selected kebeles increases by 239; .120; .212; 220; and .225 respectively. The column called sig. for each independent variable shows the p – value which is .000, meaning the relationship between the five independent variables and RWL is statistically significant at a 5% level of significance. This result led to reject the stated null hypothesis and to acceptance of the alternative directional hypothesis. Hence, it can be inferred that access to education for rural women has a positive and significant effect on their livelihood in Kebena Special woreda. Hence, access to education for rural women plays vital role in their livelihood in the study area.

4.5. Comparison between the Education Statuses of Women on Livelihood

4.5.1. One–Way ANOVA Test Results

4.5.1.1 Diagnostic Test of One–Way ANOVA Test

1. Assumption of Independence Test: The observations are random and independent samples from the populations.

One of the first steps in using the one–way ANOVA test is to test the assumption of independence. Independence is a methodological concern; it is dealt with when a study is set up. Although the independence assumption can ruin a study if it is violated, there is no way to use the study’s sample data to test the validity of this prerequisite condition. It is assessed through an examination of the design of the study (Tabachnick & Fidell, 2007). Since the design of this study was a descriptive survey and explanatory and the data were gathered from the selected rural women individually, the researcher confirmed that the five groups of rural women with educational status from no formal education (NFE) up to Diploma (DIP) were independent of each other.

2. Test of Normality Assumption: The distributions of the populations from which the samples are selected are normal: Rural Women Livelihood (RWLAS).

Normality assumption tests can be carried out graphically or by examining skewness and kurtosis (Pallant, 2005). In this study, the second was used. In both cases, skewness and kurtosis excess of the z - statistic 3.29 are a problem/a concern. This is done by dividing the skewness (kurtosis) statistic by its standard error to get the z - z-value. Therefore, concern arises when z and z (p< 0.001, two-tailed test), otherwise the normality assumption is met (Tabachnick & Fidell, 2007). Based on this idea the assumption was tested as:

Table 4.13: Test of Normality Assumption: Kurtosis and Skewness of Access and Status

Variable	Category	Skewness			Kurtosis		
		Statistic	St. error	z – statistic	Statistic	St.error	z – statistic
RWLAS	NFE	.279	.314	.8885	.747	.618	1.209
	PE	.114	.216	.5278	-.913	.428	-2.1332
	SE	-.122	.249	-.4899	-.362	.493	-.7342
	PRE	.352	.293	1.2014	-.103	.578	-.1782
	DIP	.379	.616	.6153	1.000	1.191	.8396

RWLAS: Rural Women Livelihood Activities and Status

Source: Author construct from Survey Data of SPSS output, 2023

As can be seen from Table 4.13, the z – z-statistics of the entire women’s status of education (NFE, PE, SE, PRE, and DIP) lie within the range of – 3.29 up to 3.29. These results implied that the assumption of normality was met.

2. Test of Homogeneity of variance: The variances of the distributions in the populations are equal.

Table 4.14: Test of Homogeneity of Variances

Test of Homogeneity of Variances			
RWLA			
Levene Statistic	df ₁	df ₂	Sig.
1.466	4	353	.212

Source: SPSS output, 2023

The third requirement for the ANOVA test is that the variances of each comparison group are equal. The researcher has tested this using the Levene statistic. What one is looking for here is a no-significance value that is greater than .05. One does not want a significant result,

since a significant result would suggest a real difference between variances. In this study's result, as can be seen above in Table 4.14, the significance value of the Levene statistic based on a comparison of means is 0.212. This is not a significant result, which means the requirement of homogeneity of variance has been met, and the ANOVA test can be considered to be robust.

Thus, based on the results of the three assumptions the ANOVA test was carried out to compare whether there was a significant difference existed between the status of women's education on their livelihood in the study area or not which is described in the next section below.

4.5.1.2 Comparison between the Education Statuses of Women on Livelihood

H_{o2} : There was no significant difference between the statuses of women's education on their livelihood in Kebena woreda.

H_{A2} : There was a significant difference between the statuses of women's education on their livelihood in Kebena woreda.

Table 4.15: Comparison between the Education Statuses of Women on Livelihood

ANOVA					
RWLA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.598	4	.650	7.463	.000
Within Groups	30.723	353	.087		
Total	33.322	357			

Source: SPSS output, 2023

Table 4.15 above shows the output of the ANOVA analysis and whether there is a statistically significant difference between educational status group means – between no formal education, primary education (grade 1 – 8), secondary education (grade 9 – 12), preparatory education (grade 11 – 12 and Diploma as a whole). As depicted in the table above the significance value is 0.000 (i.e., $p = .000$), which is below 0.05. This implies the rejection of the null hypothesis. Therefore, there was a statistically significant difference between groups as determined by one-way ANOVA ($F(4, 353) = 7.463, p = .000$). But this result on the comparison does not tell which groups differed from each other. Hence, in the

next section whether each group statistically differed from each of the other four groups or not was tested using Post Hoc Test. Thus, from this result, it can be said that most of the women in the Kebena Special woreda are not in a position to carry out their livelihood activities equivalently as a result of educational status differences.

4.5.1.3 Multiple Comparisons of Educational Statuses of Women on Livelihood

Table 4.16: Post Hoc Tests Results: Multiple Comparisons

Multiple Comparisons				
Dependent Variable: RWLA	(J) Educational Status	Mean Difference (I-J)	Std. Error	Sig.
(I) Educational Status				
No formal Education	Primary Education(1 - 8)	.01355	.04681	.998
	Secondary Education(9 - 10)	-.01761	.04926	.996
	Preparatory Education	-.17036*	.05291	.012
	Diploma	-.31200*	.09053	.006
Primary Education(1 - 8)	No Formal Education	-.01355	.04681	.998
	Secondary Education(9 - 10)	-.03116	.04021	.938
	Preparatory Education	-.18390*	.04461	.000
	Diploma	-.32555*	.08594	.002
Secondary Education(9 - 10)	No Formal Education	.01761	.04926	.996
	Primary Education(1 - 8)	.03116	.04021	.938
	Preparatory Education	-.15275*	.04717	.011
	Diploma	-.29439*	.08730	.007
Preparatory Education	No formal Education	.17036*	.05291	.012
	Primary Education(1 - 8)	.18390*	.04461	.000
	Secondary Education(9 - 10)	.15275*	.04717	.011
	Diploma	-.14165*	.08941	.018
Diploma	No Formal Education	.31200*	.09053	.006
	Primary Education(1 - 8)	.32555*	.08594	.002
	Secondary Education(9 - 10)	.29439*	.08730	.007
	Preparatory Education	.14165*	.08941	.018

*. The mean difference is significant at the 0.05 level

Source: SPSS output, 2023

The results in the above section indicated that there were statistically significant differences between the groups as a whole – educational status of women, from no formal education up to Diploma status. Table 4.16 above, Multiple Comparisons, shows which groups differed from each other. The Tukey post hoc test is generally the preferred test for conducting post hoc tests on a one-way ANOVA, but there are many others. One can see from Table 4.19 given above that there is a statistically significant difference in rural women's livelihood activities between those women who were in no formal education and those who were in

preparatory education status with ($p = .012$), those who were in Diploma status with ($p = .006$); between those who were in primary education status and those who were in preparatory education status and Diploma status with ($p = .000$) and ($p = .002$) respectively; between those who were in secondary education status and those who were in preparatory education status and Diploma with ($p = .011$) and ($p = .007$) respectively, as well as between preparatory education status and Diploma status with ($p = .018$). However, there were no significant differences between no formal education those who were in primary education status and those who were in secondary education status with ($p = .998$) and ($p = .996$) respectively. In this regard, the interview session with Women and Children Affair experts confirmed that most of the women who have high education status relative to those who were in between no formal education and secondary education statuses are better in their livelihood activities because most of them are successful in their day to day business activities. Therefore, from this result, it can be said that as women's educational status increases, their livelihood becomes better. Concerning the comparison between no formal education and primary as well as secondary education on their livelihood, the finding of this study is in line with the finding of Bishaw (2014) who conducted his study on the impact of education on rural women's participation in political and economic activities and found out rural women with primary and secondary school educational experience have claimed significantly higher participation in political and economic affairs and highly benefited from their participation compared to the illiterate rural women. Moreover, the findings of the study concurred with Miller et al.(2017) who carried out their study on women's education level to amplify the effects of a livelihoods-based intervention on household wealth, child diet, and child growth in rural Nepal's higher women's education was significantly associated with increased household wealth ($p < .0001$). Higher mother's education predicted better child HAZ (primary, $p = .01$, secondary, $p = .03$), and higher education of any household member was associated only with household wealth.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter is the final section that presents a summary of the findings, conclusions, and recommendations of the study. It reports a summary of the main findings of the study based on the results and the discussions. Then conclusion and recommendations were made based on the findings.

5.1. Summary of Major Findings

This study was conducted with the prime intent of assessing rural women's educational access and its effect on their livelihood in Kebena Special Woreda, Central Ethiopia. Based on the analyses, the major findings of the study are described as follows.

Regards to the extent of the socio-economic characteristics of the selected women: from the results of the descriptive statistics, 286 (79.9%) use agriculture as the main source of income, whereas 72 (20.1%) of the families use fruits and vegetable trading as the main source of their income. As to the ownership of land as a family, 316 (88.3%) are land owners with most of them having 1 hectare. Regards to ownership of livestock, 200(55.9%) have livestock, while 158 (44.1%) do not have and for those who owned livestock, 169 (84.5%) used their livestock for farming and household expenditure. As to the implementation of credit and loan opportunities, only 96 (26.8%) used credit access, while 262 (73.2%) did not use the opportunity. Moreover, for those who were in use of the opportunity, no improvement was seen in their livelihood. This result was confirmed by most of the interviewee participants, especially by male householders.

As to access to education, the result of the surveyed data shows insufficient access to education for women in the study area. In respect of the status of education of the rural women, 61.5% have primary and secondary education.

Regards to the livelihood condition, activities and status of women in the study area was assessed by eight statements such as women in participating and engaging in making their own association like 'Ekub', 'Mahiber', etc. to earn money, in carrying out forestation activities as a means of income generation, to become beneficiaries from extension services

such as agriculture and health, in participating actively in farming activities such as land preparation, ploughing, weeding, threshing, etc., in earning money from off - farm activities such as petty trade, fuel wood sale, selling animal fodder, selling fruit and vegetables, etc., the existence of NGOs and government organization in supporting women to enhance their livelihood, freedom of women to involve themselves in income generating activities and use their money and resources, and the existence of a discrimination against females in the provision of different support from different institutions, the result of the survey data shows grand mean score of 2.41 with standard deviation of .305 indicating low level of most of the participant women in the selected ten kebeles in their livelihood conditions, activities and statuses which was supported by the result obtained from male households, Kebena woreda Women and Children Affair, Education, Enterprise and Agriculture Offices interview participants and most of them stated that most of the women in the study area were not a position to engage themselves in livelihood activities as the result of this they are living in poor livelihood.

As to the extent of the effect of access to education and status of education of the rural women was assessed by nine items, the responses of the respondents on girls have no equal access to education, women's lack of formal education create problem in getting loan and credit, level of women education affected in getting possession of resources, in hiring at different government sectors, in involving in different income generating activities, efforts were not made efficiently by political and administrative bodies especially that of woman's affairs office to increase girls' participation in education, level of education affected women to become entrepreneur, rural women have no equal utilization of education and equal participation in economic activities, and educational status of women affected their decision – making in utilizing resources resulted in grand mean score of 3.95 with standard deviation .429 indicating high impact of the stated items on the livelihood of women in most of the selected ten rural kebeles of Kebena Special woreda which was supported by the results of the interview sessions with Kebena Special woreda Women and Children Affair, Education, Enterprise and Agriculture Offices.

Moreover, based on the descriptive statistics results multiple linear regression analysis was utilized to assess the effect of access to education for rural women on their livelihood.

Accordingly, the study found that equal access to education free from cultural, social, and economic imposition; sufficient number of schools from primary to college level; sufficient training centers available and open for women; rules and regulations that grant women the right to education and empower them implemented efficiently; and sufficient access to adult education for women have significant and positive effect on the livelihood of the rural women in most of the selected kebeles and 80.0% of the variance on the rural women livelihood was explained by these independent variables in combination.

On the other hand, linear regression analysis was utilized to assess the extent of the impact of rural women's education status on their livelihood. The results of the analysis revealed rural women's educational status hurt the livelihood of most women who were in no – formal education, primary education, and secondary education status, but positive and significant impact on the livelihood of most women who had preparatory and diploma educational statuses in most of the selected ten kebeles. Moreover, the study found that being in no–formal education, primary education, secondary education, preparatory, and diploma education statuses accounted for 78.3%, 77.0%, 76.3%, 69.7%, and 66.2% respectively of the variance on the livelihood of most of the women in the selected kebeles. That is, the explaining capacity of the independent variable, status of education, that of the dependent variable, livelihood of the rural women, but the remaining percentages 21.7%, 23.0%, 23.7%, 30.3%, and 33.8% respectively were explained by the variables which are not included in this study. Furthermore, the condition, activities, and status of the livelihood of the women were further assessed in terms of their status of education which was done using one – way ANOVA test. Accordingly, the result of the analysis shows significant differences between women of no – formal education, primary education, secondary education, preparatory education, and diploma in their livelihood, in particular the Post Hoc Test, pair comparison results indicate a significant difference in their livelihood between those women who were in no formal education and preparatory education status with ($p = .012$), those who were in Diploma status with ($p = .006$); between those who were in primary education status and preparatory education status and Diploma status with ($p = .000$) and ($p = .002$) respectively; and also between those who were in secondary education status and preparatory education status and Diploma with ($p = .011$) and ($p = .007$) respectively, as well as between preparatory education status and Diploma status with ($p = .018$)

5.2. Conclusion

Based on the results and findings made on the data obtained using different tools, the following conclusions are drawn.

Despite agriculture serving as the main source of income-generating activities and there being an opportunity for access to credit and loans, the results of the analysis showed that most women in the selected kebeles were poor in their socio-economic activities. Therefore, from the overall results it can be said that the socio-economic activities of most women in the selected kebeles were weak as most of them did not make use of credit and loan opportunities beyond this as their traditional sources of income could not lead them to improve their livelihood.

Despite efforts made to achieve Education for All (EFA) goals, places in the world remain where the issues of equitable access and achievement in education are still major concerns. The same is true also in Kebena Special woreda. The result of the study has shown insufficient access to education for rural women in the study area. Therefore, access to education for rural women is decisive for the overall rural livelihood activities of women in the study area. On the extent of the statuses of rural women's education, the result of the study confirmed that most of the women have low status in their education. Therefore, from the results it can be inferred that most of the women in the study area are challenged by their educational statuses.

The study result has shown the severe lack of competitive women's education that has compromised the profit margins of rural women. Their absence of sufficient skills and knowledge as a result of low-level education led the rural women to look for local markets that were not profitable. In addition, the study also ascertained that lack of access to credit facilities which was the main factor behind poverty among women in Kebena woreda. Presently, there are limited financial institutions that are willing to support or sponsor rural women to improve their livelihoods. Therefore, the researcher concluded that rural women's livelihoods in Kebena Special woreda Central Ethiopia Regional State are not successful due to not having access to training on how to cope with changes brought by technological and

economic changes to have access to markets and credit facilities and to make use of them. So, to address such things improving the status of women's education is imperative.

Regards to the livelihood conditions, activities, and statuses of women in the study area, the result shows most of the women prevailed in poor conditions, activities, and status in their livelihood. In addition, the study also confirmed the existence of significant differences between the statuses of women's education on their livelihood. Therefore, from these results, it can be inferred that as women's educational status increases, their livelihood becomes better. That is, as rural women's level of education increases, their involvement in income-generating economic activities and the possible advantages secured from their participation also increase.

As to the impact of access and statuses of rural women's education on their livelihood, the result of the regression analysis showed the significant and negative impact of having no formal education, in primary education and secondary education statuses on their livelihood, but being in preparatory education and diploma statuses have positive and significant impact on their livelihood. Therefore, from such results, it can be inferred that keeping oneself to some extent educated is imperative for the improvement of women's livelihood in the study area.

Despite the efforts made to implement different equity instruments for widening opportunities in inequity in education participation and achievement remains a major challenge in many places. On the other hand, it is an open fact that the consequence of not knowing about the existence of disparities in educational outcomes might even worsen the provision of educational opportunities for marginalized groups as well as for women. But, from the findings of this study, it is possible to conclude that rural women's level of education was poor as the majority of the women have at most secondary education level. On the other hand, the livelihood of most women was also at the poor stage as most of them were not involved in farming as well as in non-farming livelihood diversity sufficiently.

5.3. Recommendations

Based on the findings and conclusions the researcher suggests the following recommendations:

Since most of the women in the selected kebeles have no sufficient access to the market as well as poor usage of credit and loan accesses, as a way of increasing access to competitive markets, communication channels between rural women in Kebena should be enhanced through the use of modern technological devices such as cell phones, computers, televisions, and radios. This helps in identifying ready markets where women can sell their products and encourage women to diversify their rural livelihoods and tap into other resilient strategies to increase women's economic empowerment. The study further recommends the Kebena Special woreda administrators increase access to credit facilities.

The study further recommends that the government better to provide vocational schools in the Kebena Special Woreda where women can be trained on skills to engage in agricultural activities more among other rural women's livelihoods. Education and training of women will enable them to network with other women's associations which is imperative for information sharing on how women can improve household income in Kebena Special woreda through rural women's livelihood strategies.

On the other hand, the study found out as rural women's level of education increases, their involvement in income-generating economic activities and the possible advantages secured from their participation also increase. Therefore, based on the findings it is recommended that the Kebena Special Woreda Education Office incorporated with concerned stakeholders, in particular with the Kebena Administrative Office, to introduce and expand integrated and functional adult literacy along with the formal education at different levels in the rural areas. Efforts by all the mentioned stakeholders in the discussion sessions in the previous chapter better to made gender-sensitive and participatory programmers, capacity-building programmes, implementing gender equality and equity measures, social services, affirmative action, and rural infrastructure development better to be made to improve the household livelihood of women living in rural areas of Kebena Special Woreda.

REFERENCES

- Abanis, T., Sunday, A., Burani, A. & Eliabu, B. (2013). Financial management practices in small and medium enterprises in selected districts in Western Uganda. *Research Journal of Finance and Accounting*, 4(2) , 29-42
- Abebayew Aemero.(1995). “Women’s Participation in Educational Administration in Ethiopia (Unpublished Master’s Thesis).Addis Ababa University
- Abera Alemu, Tesfaye Woltamo, & Aklilu Abuto.(2021) Determinants of Women Participation in Income Generating Activities: Evidence From Ethiopia, DOI: <https://doi.org/10.21203/rs.3.rs-334075/v1> Licensed under a Creative Commons Attribution 4.0 International License.
- Afroz, M. (2010).*Effect of organizational governance on women’s participation in decision making, Master in Public Policy and Governance Program, Department of General and Continuing Education, Bangladesh: North South University*
- Ahmed, F., Siwar, C. & Idris, A., N.(2011).Sustainable Livelihood amongst Rural Women through Microcredit Programme in Bangladesh, *Australian Journal of Basic and Applied Sciences*, 5(7): 116-120, 2011 ISSN 1991-8178
- Ajay, S. S. & Micah, B. M.(2014). Sampling Techniques and Determination of Sample Size in Applied Statistics Research: An Overview. *International Journal of Economics, Commerce and Management United Kingdom*, vol.11, Issue 11
- Alemayehu Bishaw Bahir Dar University, Bahir Dar, Ethiopia. Accepted 10 December, 2013.(The impact of education on rural women’s participation in political and economic activities)
- Almaz, E.(1991). Perspectives in Gender and Development, **In:** Gender Issues in Ethiopia. Institute of Ethiopian Studies, Tsehai Berhane Selassie (Ed.).Addis Ababa University, Addis Ababa, Ethiopia
- Bebbington, A. (1999) Capitals and Capabilities: A Framework for Analyzing Peasant Viability, Rural Livelihoods and Poverty. *World Development*, 27, 2021-2044

- Belay Wombur Gurm. (2018). The role of women in livelihood security at household level among pastoral and agro-pastoral societies of Ethiopian Somali region: The case of two selected districts from Fafen Zone of Ethiopian Somali Region, *International Journal of Sociology and Anthropology*, Vol.10(4), pp. 27-42, June 2018 DOI: 10.5897/IJSA2018.0760 Article Number: 4A0B5C357410 ISSN: 2006- 988x
- Bhattacharjee A. (2012). *Social Science Research: Principles, Methods, and Practices*, Global Text Project, University of South Florida
- Bishaw, A. (2014). The impact of education on rural women's participation in political and economic activities, *International Journal of Educational Administration and Policy Studies*, Vol. 6(2), pp. 23-31, February 2014 DOI: 10.5897/IJEAPS2013.0316 ISSN 2141-6656 Academic Journals <http://www.academicjournals.org/IJEAPS>
- Birikti G/Michael T/Haimanot. (2014). An Assessment of Factors Affecting Participation of Women in Management Position: The Case of ethio telecom Company, Addis Ababa, Ethiopia
- Boating, W. (2012). Evaluating the Efficacy of Focus Group Discussion in Qualitative Social Research, *International Journal of Business and Social Science*, vol.3, No.7
- Bolitzer, B., & Godtland, E. M. (2012). Understanding the gender pay gap in the federal workforce over the past 20 years. *The American Review of Public Administration*, 42, 730-746
- Brooks, P.G. (2008). *A Monte Carlo Program for Multiple Linear Regression*, Ohio University, <http://oak.cats.ohio.edu/~broosg/software.htm>
- Caliper, H.F. (2005). *Women Leaders Study: The Qualities That Distinguish Women Leaders*. Caliper online.com.
- Clark, J. & Carney, D. (2008). A review of DFID's experience with sustainable livelihoods, Evolution of livelihoods approaches within DFID. Eldis
- Creswell, J.W. (2012). *Educational Research: Planning, Conducting, Evaluating Quantitative and Qualitative Research (4th ed.)*, University of Nebraska – Lincoln
- Creswell, J. W. (2006). *Research design, quantitative and mixed approaches (2nd Ed)*: London, Sage Publication Inc.
- Creswell, J. W. (2003). *Research design: qualitative, quantitative, and mixed method approaches*. 2nd Ed. Published by SAGE.

- Endale Alemu Hora .(2014).Factors that affect Women Participation in Leadership and Decision Making Position, *Asian Journal of Humanity, Art and Literature, Volume 1, No 2*
- Etagagne Fikre.(2019).Factors that Affecting Participation of Women's in Leadership Position in Public Sectors: in Case of Menzlalo Woreda North Shoa Zone
- Gatrell, C. (2006). *Management, Motherhood and Discrimination*, In McTavish D. & Miller K. (eds). *Women in leadership and management: New horizons in management*
- Ginige, K., Amaratunga, D. & Haigh, R.(2007). Gender Stereotypes: A Barrier for Career Development of Women in Construction, Built environment education conference, University of Sanford
- Hannagan,T. (2008). *Management Concepts & Practices*, 5th edition, Great Britain: Pearson Education
- Haregewoin C. & Emebet, M. (2003).Towards Gender equality in Ethiopia. A Profile of Gender Relations, Swedish International Development Cooperation Agency
- Hilena Beyene.(2015). Final Report national Assessment: Gender Equality and the Knowledge Society, Wisat, Women in Global Science and Technology
- Hirut Getachew.(2004). Violence against Women in Ethiopia: A Strong Case of Civil Society Concern. In: *Civil Society in Ethiopia: Reflections on Realities and Perspectives of Hope African*.Chowdhury, S.Wais, A., and Kahsai WoldeGiorgis (Eds). Asian Studies Promotion Association
- Hoare, J. and Gell, F.(2009).Women's leadership and participation: Case study on learning for action. Great Britain: Published by practical Action Publishing Ltd
- Hughes, M., with Duncan, B. and Pournik, M.(2014). 'Women's Leadership as a Route to Greater Empowerment: Report on the Diamond Leadership Model', Washington, DC: USAID
- ILO (International Labor Organization).(2012). 'Global Employment Trends for Women', Geneva: ILO
- Joanna, H. & Fiona, G.(2009). Women's Leadership and Participation, case studies on learning for action, Practical Action Publishing Ltd in association with Oxfam GB

- Kabeer, N.(2018).Livelihood Capabilities and Women's Economic Empowerment, Reviewing Evidence from Life Course, Global Evidence (GAGE) Programme
- Kemal Omer Ahmed.(2021).The Role of Female's Participation in Economic Activity to Household Income The Case of Mizan Aman Town, South Nation Nationality And People's Region, Ethiopia, DOI: <https://doi.org/10.21203/rs.3.rs-955017/v1>,
Licensed under a Creative Commons Attribution 4.0 International License
- Kollmair, M., & Gamper, St.(2002). The Sustainable Livelihood Approach, *In Development Study Group, University of Zurich (IP6)*, Aeschiried, Switzerland: Development Study Group, University of Zurich (IP6)
- Kothari, C.R.(2004).Research Methods and Techniques (2nd Ed.).University of Rajasthan, Juipur (India), New Age International
- Lax, J.& Krug, J.(2013).Livelihood assessment: A participatory tool for natural resource dependent communities, Thünen Working Paper, No. 7, Johann Heinrich von Thünen-Institut,Braunschweig,<https://nbn-resolving.de/urn:nbn:de:gbv:253-201308-dn052272-8>
- Lemlem Bekele.(2016).Assessment of Factors Affecting Women Participation in Managerial Positions: The Case Of Arba Minch University, Arba Minch, Ethiopia
- Makeda W/Hiwot.(2017).Assessment of Productive Safety Net Program Effectiveness in Improving the Livelihoods of Women Beneficiaries: The Case of Zeway Dugda Woreda, Arsi Zone, Oromia Region, (Unpublished MA Thesis), Addis Ababa, Ethiopia
- Meaza Ashenafi.(2009). Factors Affecting Women Participation in Politics and Decision making, Unpublished M.A. Thesis, Addis Ababa, Ethiopia
- Mbugua, W. (2007).An investigation of factors influencing women progression to leadership positions in Kenya: a case study of four selected institutions. A research report submitted in partial fulfillment of a degree of master's in business administration, Kenyatta University
- Miller, L.C., Joshi, N., Lohani, M., Rogers, B., Mahato, S., Ghosh, S. & Webb, P.(2017).Women's education level amplifies the effects of a livelihoods-based intervention on household wealth, child diet, and child growth in rural Nepal, *International Journal for Equity in Health*, 16:183 DOI 10.1186/s12939-017-0681-0
- Mugenda, O. & Mugenda, A.(2003).Research Methods: Quantitative and Qualitative Approaches. Act Press: Nairobi

- Nahusenay A. & Tessfaye T.(2015). Roles of Rural Women in Livelihood and Sustainable Food Security in Ethiopia: A Case Study from Delanta Dawunt District, North Wollo Zone. *International Journal of Nutrition and Food Sciences*, Vol. 4, No. 3, 2015, pp. 343-355. Doi: 10.11648/j.ijnfs.20150403.22
- Ogato, G., S. (2013). The quest for gender equality and women's empowerment in least developed countries: Policy and strategy implications for achieving millennium development goals in Ethiopia, *International Journal of Sociology and Anthropology*. Vol.5, No.9, December 2013
- Pallant, J.(2005)., *SPSS Survival Manual: A Step by Step guide to data analysis using SPSS for windows*. (Version 12)
- Preliminary Gender Profile of Ethiopia, Addis Ababa, Ethiopia (2014)
- Sabharwal, M. (2015).From glass ceiling to glass cliff: Women in senior executive service. *Journal of Public Administration Research and Theory*, 25, 399-426
- Samuel Negash.(2017).The impact of Early Marriage on Rural Girls' Education: in Primary Schools of Wahil Cluster of Dire Dawa, Ethiopia, Unpublished MA Thesis, Haramaya University
- Saunders, M., Lewis, P. and Thornhill, A.(2007). *Research method for Business students*, England: Pearson Education Ltd
- Sayer, J. & Campbell, B.(2003). *The Science of Sustainable Development Local Livelihoods and the Global Environment* Cambridge University Press
- Sikdar, A. & Mitra, S.(2008).*An exploration of gender stereotypes in perception and practice of Leadership: Working paper series*. Dubai: University of Wollangoing
- Tabachnick, B. G., & Fidell, L. S.(2007). *Using Multivariate Statistics* (5th ed.). Needham Heights, MA: Allyn & Bacon
- Tadele Tesfaye.(2019). Challenges of Rural Women's Livelihoods and Coping Strategies; The Case of Boloso Sore Woreda, Wolayta Zone, SNNPR, Ethiopia, *Social Science Review Volume 5, Issue 2, December 2019 ISSN 2518-6825*
- Tavakol, M. & Dennick, R. (2011).Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2: 53 – 55
- Temesgen Oljira & Muleta Hailu.(2021). Integrated Functional Adult Education Program and its Contribution for Livelihoods in Ethiopia

- The Economist.(2015). ‘What’s Holding Women Back?’ www.economist.com/blogs/democracyinamerica/women-and-work, accessed 10 August 15
- Tizita Mulugeta Yimam.(2013). Female Headed Households and Their Livelihood in Bati Wäräda, South Wollo: Practices and Resistance, Unpublished Doctoral Thesis
- Tsegay, K.N., Fan, H., Adikari, A.M.P., Shifare, H.(2021). Does gender matter for household livelihood diversification in Ethiopia rural areas? *Research in Business & Social Science IJRBS VOL 10 NO 6 ISSN: 2147-4478*
- UNICEF Ethiopia Fact Sheet – Girls Education (November, 2018)
- Unlocking the Potential of Rural Women in Ethiopia (2017): Joint programme on “Accelerating Progress towards the Economic Empowerment of Rural Women (RWEEJP)
- Warner, J. (2014). *The Women’s Leadership Gap*. Center for American Progress. Wilson, G., Roscigno, V., & Huffman, M. (2015). Racial Income Inequality and Public Sector Privatization, *Social Problems*, 62(2), 163-185
- Wekesa, W.P.(2013). *An Assessment of Factors Affecting Students’ Performance in secondary Schools in Kakamega country*, Kenya University.
- Yamane (1967) cited in Ajay and Micah (2014).

Appendix A: English Version Questionnaire



Wolkite University
School of Post Graduate Studies
College of Social Science and Humanities Department of Governance and
Social Studies

Questionnaire to be filled by rural women respondents

Dear respondent,

I am MA candidate in the department of developmental planning and management, Wolkite University. This research will be conducted as part of the requirements for my MA in developmental planning and management. The purpose of this Questionnaire is to collect data on “**rural women education access and its impact on their livelihood in Kebena Special Woreda, Central Ethiopia Regional State**”. On the bases of this objective, the researcher would like to invite you to participate in this study as a respondent because you are currently resident in Kebena Woreda, the study area. In this study 384 women will take part to complete the questionnaire. This research is conducted only for academic purpose and doesn't affect you personally in any corner. Therefore, you are kindly requested to participate actively and give your frank and relevant information on the bases of the following points. Your participation is completely voluntary; your personal information will be treated confidentially. In addition, all files used the researcher during the course of the survey will be passed word-protected, and shared with no other person. Thus your genuine and honest response is vital for the success of this study.

Section II: Socio – economic Characteristics

1. Source of income and access to resources

1.1 What is the main source of income for your family? _____

1.2 Do you own a land as a family? A. Yes B. No

1.3 If your answer is ‘yes’ for question # 1.2, how many hectares (*timad*) is it?

A.1 hectare B. 2 hectares C. 3 hectares D. More than 3 hectares

1.4 Do you have livestock’s? A. Yes B. No

1.5 If your answer is ‘yes’ for question # 1.4, how do you use them?

A. for farm activities only B. for both farm and household expenditure

C. for both farm and income generating

2. Access to credit and ability to borrow

2.1 Do you have access to credit?

A. Yes B. No

2.2 If your answer is ‘yes’ for question #2.1, what are the sources (formal and traditional institutes) you have access to?

A. Relatives B. friend C. Microfinance D. If there is other, specify _____

2.3 If your answer is ‘yes’ for question # 2.1, do you have the ability to borrow?

A. Yes B. No

2.4 If your answer is ‘yes’ for question #2.3, does your living standard improved?

A. Yes B. No

3. Rural women’s various livelihood activities

Instruction: Below are lists of statements pertaining to rural women’s various livelihood activities. Please tick (√) the appropriate scale that indicates your agreement in the table

given below. The values of the scales are 5 = Strongly Agree (SA), 4= Agree (A), 3= Undecided (U), 2= Disagree (D), 1= Strongly Disagree (SD).

No	Items	Values of Scales				
		5	4	3	2	1
1.	Women are actively participated and engaged in making their own association like 'Ekub', 'Mahiber', etc. to earn money.					
2.	Women are carried out forestation activities as a means of income generation.					
3.	Women become beneficiaries from extension services such as agriculture and health.					
4.	Women are participated actively in farming activities such as land preparation, ploughing, weeding, threshing, etc.					
5.	Women earn money from off - farm activities such as petty trade, fire wood selling, selling animal fodder, selling fruit and vegetables, etc.					
6.	There is NGOs and government organization that supports women.					
7.	Women are free to involve themselves in income generating activities and use their time, money and resources.					
8.	There is a discrimination against females in the provision of different support from different institutions.					

Section III: Access and level of education

Instruction: Below are lists of statements in connection with access and level of education of rural women. Please tick (√) the appropriate scale that indicates your agreement in the table below. The values of the scales are 5 = Strongly Agree (SA), 4 = Agree (A), 3 = Undecided (U), 2 = Disagree (D), 1= Strongly Disagree (SD).

No	Items	Values of Scales				
		5	4	3	2	1
1.	Girls have equal access to education in your locality.					
2.	Women's lack of formal education create problem in getting loan and credit.					
3.	Your level of education affected women's possession of resources.					
4.	Your level of education affected you in hiring at different government sectors.					
5.	Your level of education affected you in involving in different income generating activities.					
6.	Efforts are made by political and administrative bodies especially that of woman's affairs office to increase girls' participation in education.					
7.	Your level of education affected you to become entrepreneur.					
8.	Rural women have equal utilization of education and equal participation in economic activities.					
9.	Educational status of women affected their decision – making					

Section IV: Core rural livelihood indicators

Instruction: Below are lists of statements about core rural livelihood indicators to assess the extent of their implementation in the study area for rural women. Please tick (✓) the appropriate scale that indicates your agreement in the table below. The values of the scales are 5 = Strongly Agree (SA), 4 = Agree (A), 3 = Undecided (U), 2 = Disagree (D), 1 = Strongly Disagree (SD).

No	Items	Values of Scales				
		5	4	3	2	1
1.	Socio-political condition of your area is free from social and ethnic conflicts.					
2.	The study area is not vulnerability in terms geographical, physical infrastructure and hazard.					
3.	In respect of livelihood assets, there is access to capitals, land tenure and pasture access arrangements.					
4.	Sufficiency and diversity of food products are available in markets and households					
5.	There is variation and trend of market prices of staple food and basic commodities.					

Appendix B: Interview

Interview guide questions for Women, Youth and Children affairs Office respondents

Dear respected respondents,

This semi-structured interview is designed to collect data for a master's research entitled on **“Rural women education access and its effect on their livelihood in Kebena Special Woreda, Central Region”**. Thus you are kindly requested to be considerate in answering the questions raised in interview session.

Thank you for your participation!

Following is a list of interview guide questions:

1. Do girls have equal access to education free from cultural, social and economic imposition in your Woreda? Would you describe it in detail?
2. How do you describe rural women education status in your Woreda?

3. What type of agricultural extension services and technical assistance provided to rural women to enhance their household food security?
4. Do you think that rural women have equal power in making decision on the utilization of resources?
5. In your opinion do you think that local leaders and the community recognize the role of women in education?
6. How do you describe the role and contribution of rural women in socio – economic activities in your woreda?
7. How do you describe the livelihood diversification of rural women in your woreda?
8. Is there any governmental and non – governmental institutions that provide training to help rural women to enhance their ability and to engage them into income generating activities?
9. How do you describe microfinance institutions in providing credit and loan for rural women to support them to involve in income generating activities?
10. Is/Are there basic factor(s) that hinder rural women from equal utilization of education and equal participation in economic activities? If so, would you mention some and elaborate?
11. In your opinion do you think that the role of women in household food security is recognized by the larger community members?
12. What type of measures, do you suggest, should be taken by the government and development actors to increase the participation and recognition of women particularly in education?
13. In general, how do you describe the impact of access and status of education on the livelihood of rural women in your woreda?

Appendix B: የአማርኛ መጠይቅ



ወልቂጤ ዩኒቨርሲቲ

የድህረ-ምረቃ ትምህርት ቤት

የማህበራዊ ሳይንስና የሰብዓዊነት አስተዳደር እና ማህበራዊ ጥናቶች ኮሌጅ

መጠይቁ በገጠር ሴቶች ምላሽ ይሰጣል

ውድ ምላሽ ሰጪ

በወልቂጤ ዩኒቨርሲቲ በልማት ፕላን እና አስተዳደር ክፍል የሁለተኛ ዲግሪ ተማሪ ነኝ። ይህ ጥናት የሚካሄደው በእድገት እቅድ እና አስተዳደር ውስጥ ለማስተርስ ዲግሪ የመመረቂያ ጽሑፍ ማሟያ አካል ነው። የዚህ መጠይቅ አላማ በማዕከላዊ ኢትዮጵያ ክልል በቀቤና ልዩ ወረዳ የገጠር ሴቶች የትምህርት ተደራሽነት እና በኑሮአቸው ላይ የሚያደርሰውን ተፅዕኖ መረጃ መሰብሰብ ነው። ይህንን ዓላማ መሰረት በማድረግ አጥኚው በዚህ ጥናት ላይ እንድትሳተፉ ይጋብዛችኋል። ምክንያቱም እርስዎ በአሁኑ ጊዜ በቀቤና ወረዳ፣ የጥናት ቦታው ውስጥ ነዋሪ ስለሆኑ። በዚህ ጥናት 384 ሴቶች መጠይቁን ለመሙላት ይሳተፋሉ። ይህ ጥናት የሚካሄደው ለአካዳሚክ ዓላማ ብቻ ነው እና እርስዎን በማንኛውም ጥግ ላይ አይነካዎትም። ስለዚህ ንቁ ተሳትፎ እንድታደርጉ እና በሚከተሉት ነጥቦች መሰረት ግልፅ እና ጠቃሚ መረጃ እንድትሰጡ በአክብሮት እጠይቃለሁ። የእርስዎ ተሳትፎ ሙሉ በሙሉ በፈቃደኝነት ነው፣ የግል መረጃዎ በሚስጥር ይያዛል። በተጨማሪም፣ በዳሰሳ ጥናቱ ወቅት አጥኚው የተጠቀሙባቸው ሁሉም ፋይሎች በቃላት ተጠብቀው ይተላለፋሉ እና ከሌላ ሰው ጋር አይጋሩም። ስለዚህ የእርስዎ እውነተኛ እና ታማኝ ምላሽ ለዚህ ጥናት ስኬት አስፈላጊ ነው።

መመሪያ፡ ለብዙ ምርጫ ጥያቄዎች/ዕቃዎች፣ ምርጫዎን በዚህ መሠረት በመክለል ምላሽ ይስጡ፣ ነገር ግን ክፍት ለሆኑ ጥያቄዎች፣ መልስዎን በተሰጠው ቦታ ላይ መስጠት ይችላሉ።

1. የመኖሪያ ቦታ _____
2. ዕድሜ ፡ ሀ. ከ21 ለ በታች። 21 - 30 ዓመታት ሐ. 31 - 40 ዓመታት መ 41 - 50 ዓመት ሰ. ከ 50 ዓመት በላይ
3. የጋብቻ ሁኔታ፡ ሀ. ያላገባ ለ/ ያገባ ሐ/ ባል የሞተብኝ መ/ የተፋታ
4. ምን አይነት ቤተሰብ አላችሁ? ሀ. ወንድ ሐላፊ ለ. ሴት ሐላፊ

5. ሃይማኖት፡ ሀ. ኦርቶዶክስ ለ/ ሙስሊም ሐ/ ፕሮቴስታንት መ/ካቶሊክ ሠ/ ሌላ ካለ፣ እባክዎን ይግለጹ_____

6. የትምህርት ደረጃ፡-

ሀ/ መደበኛ ትምህርት የለም ለ/ አንደኛ ደረጃ ትምህርት ቤት፡ 1ኛ ክፍል - 8

ሐ/መሰናዶ ትምህርት ቤት፡ 11 - 12ኛ ክፍል

መ/ ሁለተኛ ደረጃ ትምህርት ቤት፡ 9 - 10ኛ ክፍል

ሠ/ ዲፕሎማ

ረ/ ዲግሪ

ሸ/ ማስተርስ እና ከዚያ በላይ

7. የቤተሰብዎ መጠን ስንት ነው?

ሀ/ 1 - 3 ለ/ 4 - 6 ሐ/ 7 - 9 መ/ ከ 9 በላይ

ክፍል II: ማህበራዊና - ኢኮኖሚያዊ ባህሪያት

1. የገቢ ምንጭ እና የሀብቶች ተደራሽነት

1.1 ለቤተሰብዎ ዋናው የገቢ ምንጭ ምንድን ነው?

ሀ/ግብርና ለ/ ንግድ ሐ/ የመንግስት ስራ መ/ ከብት እርባታ ሠ/ ሌላ ካለ ይጠቀስ

1.2 እንደ ቤተሰብ የመሬት ባለቤት ነዎት? ሀ/ አዎ ለ/ አይደለሁም

1.3 ለጥያቄ # 1.2 መልስዎ 'አዎ' ከሆነ ስንት ሄክታር (ጥማድ) ነው?

ሀ. 1 ሄክታር ለ/2 ሄክታር ሐ/ 3 ሄክታር መ/ ከ 3 ሄክታር በላይ

1.4 የከብት እርባታ አለዎት? ሀ/ አዎ ለ/ የለኝም

1.5 ለጥያቄ # 1.4 መልስዎ 'አዎ' ከሆነ እንዴት ይጠቀማሉ?

ሀ/ ለእርሻ ስራዎች ብቻ B/ ለእርሻ እና ለቤተሰብ ወጪዎች ሐ/ ለእርሻ እና ለገቢ ማስገኛ

2. ብድር ማግኘት እና የመበደር አቅም፤- ብድር የማግኘት እድል አለህ? ሀ/ አለኝ ለ/ የለኝም

ለጥያቄ #2.1 የሰጡት መልስ 'አዎ' ከሆነ ምን ምን ምንጮቹ (ከመንግስት እና ባህላዊ ተቋማት) ማግኘት ይችላሉ?

ሀ/ዘመዶች ለ/ ጓደኛ ሐ/ ማይክሮ ፋይናንስ መ/ሌላ ካለ ይግለጹ_____

ለጥያቄ # 2.1 መልስዎ 'አዎ' ከሆነ የመበደር አቅም አለዎት? ሀ/ አለኝ ለ/ የለኝም

ለጥያቄ #2.3 መልስዎ 'አለኝ' ከሆነ፣ የኑሮ ደረጃዎ ተሻሽሏል? ሀ/ ተሻሽሏል ለ/አልተሻሻለም

3. የገጠር ሴቶች የተለያዩ የኑሮ እንቅስቃሴዎች

መመሪያ : ከዚህ በታች የገጠር ሴቶችን የተለያዩ መተዳደሪያ ተግባራትን የሚመለከቱ መግለጫዎች ተዘርዘረዋል።

እባክዎ (✓) ከዚህ በታች ባለው ሠንጠረዥ ውስጥ የእርስዎን ስምምነት የሚያመለክት ተገቢውን ሚዛን ምልክት ያድርጉ።

5 =በጣም እስማማለሁ ፣4= እስማማለሁ ፣3=አላውቅም ፣ 2=አልስማማም (መ)፣ 1= በጣም አልስማማም ።

ተ.ቁ	ዘርዘር መጠይቅ	መመዘኛዎች				
		5	4	3	2	1
1	.ሴቶች የነቃ ተሳትፎ በማድረግ የራሳቸውን ማህበር እንደ 'ዕቁብ'፣ 'ማህበር' ወዘተ በማቋቋም ተሰማርተው ገቢ ማግኘት።					
2	ሴቶች በገቢ ማስገኛ መንገድ የደን ስራዎች ይከናወናሉ.					
3	.ሴቶች እንደ ግብርና እና ጤና ባሉ የኤክስቴንሽን አገልግሎቶች ተጠቃሚ ናቸው።					
4	.ሴቶች በእርሻ ስራዎች ላይ በንቃት ይሳተፋሉ እንደ መሬት ዝግጅት, ማረስ, አረም ማረም, አውድማ,ማዘጋጀት ወዘተ.					
5	.ሴቶች ከስራ ውጭ ገቢ ያገኛሉ - እንደ ጥቃቅን ንግድ ፣ ማገዶ እንጨት ሽያጭ ፣ የእንስሳት መኖ መሸጥ ፣ አትክልትና ፍራፍሬ መሸጥ ፣ ወዘተ.					
6	ሴቶችን የሚደግፉ መንግስታዊ ያልሆኑ ድርጅቶች እና የመንግስት ድርጅቶች አሉ።					
7	.ሴቶች ራሳቸውን በገቢ ማስገኛ እንቅስቃሴዎች ውስጥ ለመሳተፍ እና ጊዜያቸውን፣ ገንዘባቸውን እና ሀብታቸውን ለመጠቀም ነፃ ናቸው።					
8	.ከተለያዩ ተቋማት የተለያዩ ድጋፎችን ሲሰጥ በሴቶች ላይ አድልዎ አለ።					

ክፍል III: የትምህርት ተደራሽነት እና ደረጃ

መመሪያ:- ከገጠር ሴቶች ተደራሽነትና የትምህርት ደረጃ ጋር በተገናኘ የተዘረዘሩ መግለጫዎች ከዚህ በታች ቀርበዋል። እባክዎ (✓) ከዚህ በታች ባሉት ሰንጠረዦች ውስጥ የእርስዎን ስምምነት የሚያመለክት ተገቢውን ሚዛን ምልክት ያድርጉ።

ተ. ቁ	ዘርዘር መጠይቅ	መመዘኛዎች				
		5	4	3	2	1
1	በአካባቢዎ ያሉ ልጃገረዶች እኩል የትምህርት እድል አላቸው።					
2	የሴቶች መደበኛ ትምህርት እጥረት ብድር እና ብድር ለማግኘት ችግር ይፈጥራል።					
3	የአንተ የትምህርት ደረጃ የሴቶችን የሀብት ባለቤትነት ነካ።					
4	የትምህርት ደረጃዎ በተለያዩ የመንግስት ዘርፎች በመቅጠር ላይ ተጽዕኖ አሳድሯል።					
5	የትምህርት ደረጃዎ በተለያዩ የገቢ ማስገኛ ስራዎች ላይ በመሳተፍ ላይ ተጽዕኖ አሳድሯል።					
6	የሴቶችን የትምህርት ተሳትፎ ለማሳደግ በፖለቲካ እና በአስተዳደር አካላት በተለይም በሴቶች ጉዳይ ቢሮ ጥረት እየተደረገ ነው።					
7	የትምህርት ደረጃህ ሥራ ፈጣሪ እንድትሆን ነካህ።					
8	የገጠር ሴቶች እኩል የትምህርት አጠቃቀም እና በኢኮኖሚያዊ እንቅስቃሴዎች እኩል ተሳትፎ አላቸው።					
9	የሴቶች የትምህርት ደረጃ በውሳኔያቸው ላይ ተጽዕኖ አሳድሯል - ሀብቶችን በመጠቀም ላይ።					

ክፍል IV: ዋና የገጠር መተዳደሪያ አመልካቾች

መመሪያ:- ለገጠር ሴቶች በጥናት አካባቢ የተተገበሩበትን መጠን ለመገምገም ስለ ዋና የገጠር ኑሮ አመልካቾች መግለጫዎች ከዚህ በታች ቀርበዋል።

እባክዎ (✓) ከዚህ በታች ባሉት ሰንጠረዦች ውስጥ የእርስዎን ስምምነት የሚያመለክት ተገቢውን ሚዛን ምልክት ያድርጉ።

ተ. ቁ	ዘርዘር መጠይቅ	መመዘኛዎች				
		5	4	3	2	1
1	ያአካባቢዎ ማህበራዊ እና ፖለቲካዊ ሁኔታ ከማህበራዊ እና ጎሳ ግጭቶች የጸዳ ነው.					
2	ያጥናቱ አካባቢ ከጂኦግራፊያዊ፣ ከመሰረተ ልማት እና ከአደጋ አንጻር የተጋለጠ አይደለም።					
3	ያመተዳደሪያ ንብረቶችን በተመለከተ የካፒታል, የመሬት ይዞታ እና የግጦሽ አቅርቦት ዝግጅቶች አሉ.					
4	ያምግብ ምርቶች በቂነት እና ልዩነት በገበያ እና በቤተሰብ ውስጥ ይገኛሉ					
5	ያዋና ምግብ እና የመሠረታዊ ሽቀጦች የገበያ ዋጋ ልዩነት እና አዝማሚያ አለ።					

አባሪ ለ፡ ቃለ መጠይቅ

ለሴቶች፣ ወጣቶች እና ህጻናት ጉዳይ ቢሮ ምላሽ ሰጪዎች የቃለ መጠይቅ መመሪያ ጥያቄዎች

ውድ የተከበራችሁ መላሾች

ይህ በከፊል የተዋቀረ ቃለ ምልልስ “በጉራጌ ዞን ቀቤና ወረዳ የገጠር ሴቶችን የትምህርት ተደራሽነትና በኑሮአቸው ላይ የሚያደርሰውን ተፅእኖ” በሚል ርዕስ የማስተርስ ጥናት መረጃ ለመሰብሰብ ታስቦ የተዘጋጀ ነው።

ስለዚህ በቃለ መጠይቅ ክፍለ ጊዜ የተነሱትን ጥያቄዎች ለመመለስ አሳቢነት እንዲሰጡ በአክብሮት እንጠይቃለን።

ለተሳትፎዎ እናመሰግናለን!

የሚከተለው የቃለ መጠይቅ መመሪያ ጥያቄዎች ዝርዝር ነው፡-

1. ከጠቅላላው የገጠር ሴቶች መካከል ምን ያህሉ የትምህርት ዕድል አግኝተዋል?
ደረጃቸውን እንዴት ይገልጹታል?
 2. ለገጠር ሴቶች የቤተሰብን የምግብ ዋስትና ለማሻሻል ምን ዓይነት የግብርና ኤክስቴንሽን አገልግሎት እና የቴክኒክ ድጋፍ እየተደረገ ነው?
 3. የገጠር ሴቶች በሃብት አጠቃቀም ላይ ውሳኔ ላይ እኩል ስልጣን አላቸው ብለው ያስባሉ?
 4. በእርስዎ አስተያየት የአካባቢ መሪዎች እና ማህበረሰቡ የሴቶችን የትምህርት ሚና የተገነዘቡ ይመስላችኋል?
 5. የገጠር ሴቶች በወረዳዎ በማህበራዊ - ኢኮኖሚያዊ እንቅስቃሴዎች ውስጥ ያላቸውን ሚና እና አስተዋፅኦ እንዴት ይገልጹታል?
 6. በወረዳዎ ያለውን የገጠር ሴቶች የኑሮ ልዩነት እንዴት ይገልፁታል?
 7. በገጠር ያሉ ሴቶች አቅማቸውን እንዲያሳድጉ እና በገቢ ማስገኛ ስራዎች ላይ እንዲሰማሩ ስልጠና የሚሰጡ መንግስታዊ እና መንግስታዊ ያልሆኑ ተቋማት አሉ ወይ?
 8. በገጠር ያሉ ሴቶች በገቢ ማስገኛ ሥራ ላይ እንዲሰማሩ የሚደግፉበትን የብድርና የብድር አገልግሎት የማይክር ፋይናንስ ተቋማት እንዴት ይገልጹታል?
 9. የገጠር ሴቶች እኩል የትምህርት ተጠቃሚ እንዳይሆኑ እና በኢኮኖሚያዊ እንቅስቃሴዎች እኩል እንዳይሳተፉ የሚያደናቅፉ መሰረታዊ ምክንያቶች አሉን?
- ከሆነ ጥቂቶቹን ጠቅሰው ያብራራሉ?
10. በእርስዎ አስተያየት የሴቶች የቤት ውስጥ ምግብ ዋስትና ላይ ያላቸው ሚና በትልቁ የማህበረሰብ አባላት እውቅና ያገኘ ይመስላችኋል?
 11. ሴቶች በተለይም በትምህርት ዘርፍ ያላቸውን ተሳትፎና እውቅና ለማሳደግ በመንግስትና በልማት ተቋማት ምን ዓይነት ርምጃዎች ሊወሰዱ ይገባል ይላሉ?