

**GENDER DIMENSIONS OF SUSTAINABLE FOOD
SECURITY AT HOUSEHOLD LEVEL: THE CASE OF TWO
SELECTED KEBELES OF HARARI REGION**

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Acronyms

- BOFED** - Bureau of Finance and Economic Development (Harari Region).
- CSA** - Central Statistics Authority.
- DAW** - Division of the Advancement for Women.
- DPPD** - Disaster Prevention and Preparedness Department.
- FAO** - Food and Agricultural Organization (of the United Nations).
- FCND** -Food Consumption and Nutrition Division.
- FDRE** -Federal Democratic Republic of Ethiopia.
- HPNRS** -Harari People National Regional State.
- IFPRI** -International Food Policy Research Institute.
- MOA** -Ministry of Agriculture.
- PEDB** -Planning and Economic Development Bureau.
- UN** -The United Nations.
- UNDP** -United Nations Development Program
- USAID** -United States Assistance for International Development

Abstract

In recent years there has been increased recognition of the crucial importance of women's contribution to food security. The roles of rural women in sustaining the livelihood of the family and food security at national level are also noted high. In this regard this study assessed the issue of Gender Dimensions of Sustainable Food Security at household level. The case of two selected kebeles of Harari Region. On top of that the study outlined a general objective which is stated as -to assess the various dimensions of gender and its contributions towards the attainment of sustainably food secured communities at household level in Ulanula and Kile kebeles of the Harari region.

To briefly assess the above objective, the study pursued three major data gathering methods one after the other. Survey using questionnaires, focus group discussion and a key informant interviews. The sample survey was carried out in Ulanula and Kile rural kebeles. The main reason to select the two kebeles as a study areas was because these kebeles were prone to draught and famine in different years therefore a total of 120 sample households were selected from the two kebeles in order to carry out the sample survey. Moreover two focus groups discussions were held the first in Ulanula and the second in Kile rural kebele with a group of knowledgeable people both men and women farmers so that to easily check and clarify issues raised in the sample survey. A key informant interviews were also held to get in depth information on the issue.

Hence, the result of the survey reveals that even in the prevalence of gender disparity in the community, women are still central and very important figures for a household to have continuous accesses to adequate and nutrient food either through production or purchases sustainably. The study also reveals that women contribute more incomes than men to the total income of the households. moreover the study verify that women in the sampled households spend almost all of their individual incomes on staple and non staple food purchases while men spend more than half of their income on personal needs. On the other hand, the study identifies several factors that affect women's roles in the household food security such as, lack of control over the household productive resources, the ability of the women to make necessary decision over household income found to be very less further more, the absence of facilities such as health and shortage of water are the most commonly cited problems. Under all these circumstances the study once again reveals that in every aspect of the household food economy activities women play more roles than men.

CHAPTER ONE: INTRODUCTION

1.1 Background to the Problem

Food security is a concept that can generally be addressed to the global, regional, national, sub-national, community and household levels. The concept of food security has been developing since early 1970s but the concept of household food security in particular is of recent development and the bulk of the literature dates from 1980s (Gethahun, 2003). The definition of food security made at the household level has enabled researchers to effectively include all the variables that interplay in food security and their gender dimensions (Haregewoin, 2003). Currently, policy makers have begun to recognize that meeting world future food needs depends more than ever on the capabilities and resources of women. Women account for more than two thirds of food production in Asia and some 45 percent in Latin America and the Caribbean (FAO, 2003).

Women farmers in Sub-Sahara Africa produce more than three quarters of the region's basic food manage some two-thirds of marketing and at least one half the activities required for storing food and raising animals (Saito, 1994). On top of the above facts, women across the developing world play key roles in maintaining household food security and in caring for children on a day to day basis, both of which are extremely important factors influencing a child's nutritional status (Wendemsamregne, 2004). Women, depending on the region are often highly involved in food production and acquisition thus boosting food security.

Gender differentials in the farm household also play a significant role in the economic performance of a given household. A great deal of empirical research has convincingly demonstrated that gender is important in defining the economic role of rural people in Africa (McSweeney, 1979). This in turn has

resulted in a growing recognition that men and women often have different rights and responsibilities with respect to resource use and decision making.

This recognition has resulted in the production of a number of studies documenting the roles of women and men in various farm, non-farm, food preparation, household maintenance and childcare activities (Whitehead, 1985; Yared, 1999). For instance, Yared, (1999:149) stated that “the nature of meals reflects aspects of household social relations and roles and hence meal preparation and provision by women denotes their role as primary managers of food stores and food consumption.” Further more, it has been recognized that both gender and household based approaches are useful frameworks for targeting policy and interventions in rural areas (Warner et al.,1997). Agricultural productivity could also be determined by gender differences if men and women use different technologies or different quantities of factors or there are differences in the quality of these factors (Saitio, 1994).

Over and above, the rural sector in many developing countries is increasingly characterized by the prevalence of poverty and food insecurity (FAO, 1990).

1.2 Statement of the Problem

According to Haragewoin (2003), women suffer extreme poverty and are among the 44% of Ethiopians who are below poverty line. She further notes that gender roles have created differential treatment for men and women whose share of resources and benefits between the two sexes is unequal. Women as a result are poorer than men and at higher risk of vulnerability to food insecurity.

Moreover, as discussed in Wendemariamregne (2004) social, economic and cultural factors, as well as the biological requirements of child birth and lactation, have led to women’s higher vulnerability which refers to the degree of susceptibility to external events relative to men. Yared (1999) also explains the impact of varying household food availability on child nutrition and notes

that male favored over females and children in meeting their calorific requirements. In fact, women and children are likely to be disadvantaged nutritionally.

In addition to the above facts, a recent study undertaken by Wendemariamregne, (2004) on the socio economic determinants of malnutrition in the Regional State of Harari reveals that the region is one of the regions in Ethiopia that suffers from child malnutrition. Besides, according to a Report on the 1998 Health and Nutrition Survey made by CSA, about 46% of children in the rural areas of Harari Region are stunted from which around 27% are severely stunted (CSA, 1998) in a sense that not having a normal growth because of the prevalence food deficiency in the rural areas of the region. The additional fact revealed by the results of the recent study discussed above shows that significantly high rates of under weight are prevalent in Ulanula and Kile kebeles. Ulanula, a local rural kebele name in Harari Region and literally means 'mountain over a mountain', kebele compared to others (Wendemariamregne, 2004). This drought prone kebele is frequently affected by food insecurity and besides, it is relatively the remotest kebele having difficult topographic nature in the Harari Region. Kile is also known with its seriously depleted land and almost every year affected by before harvest food shortage in the region.

The problem also becomes more critical since there is no relevant documented data on issues of specifically women's and men's roles and contribution in the attainment of household food security.

Therefore, the research attempts to fill this gap by assessing the significance of gender roles on the achievement of sustainable food security at household level in the region. This study utilizes a case study approach to analyze the role of gender in the attainment of sustainable household food security in Ulanula and Kile kebeles of Harari Region.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of the study is to assess the various roles of gender and their contributions towards the attainment of sustainably food secured communities at household level in Ulanula and Kile kebeles of the Harari region.

1.3.2. Specific Objectives

The specific objectives of this study are:

- To investigate the specific roles of women and men in maintaining household food stock in the community.
- To identify the off-farm, on-farm and non-farm activities engaged by women and men for the household foods security.
- To assess women's access and control over the critical household resources.
- To investigate women's role in the decision of household income and agricultural product.

1.3.3. Research Questions

The study attempts to find answers for the following research questions.

- What are the specific roles of women and men in maintaining household food stock in the community?
- What are the off-farm, on-farm and non farm activities engaged by women and men for the household food security?
- Do women have access and control over the critical household resources?
- Do women have any role in the decision of household income and agricultural product?

1.4 Significance of the Study

Lack of enough and appropriate investigations, specifically studies that are comprehensive and exhaustive on the issue of the problem of food insecurity in the study area produced a gap in the provision of relevant and reliable information. Thus, academically, this study will serve as a spring-board for further studies in the region on the issues of food security. On the other hand, practitioners will use the study for planning and implementation of possible intervention policies regarding food security.

1.5 Research Methodology

1.5.1 Sampling Techniques and Sample Population

The Harari Region has 9 weredas of which 6 are urban and 3 are rural. Of the 3 rural weredas, 2 were purposefully selected. These are Sofi and Ererer rural weredas. Each of these has 4 kebeles. Thus, for the purpose of this study Ulanula rural kebele from Ererer woreda and Kile rural kebele from Sofi wereda were taken. The reason of purposefully selecting Ulanula and Kile rural kebeles as study areas is because these kebeles were prone to draught and famine in different years.

The population of the study is the rural kebele population of Ulanula and Kile, both kebels have an average of 5 villages. Therefore 2 representative villages from each kebeles and a total of 4 villages with 800 households were taken on the basis of their geographic distributions to develop the sampling frame. Finally using simple random sampling, from each village 15 % of household were drawn randomly, which is considered to be statistically significant procedure of sampling. Thus, a total of 120 households were selected for the sample survey, as in the table below. The respondents were both women and men.

Name of Kebeles	Name of Villages	Total Households	Selected sample Households
Kile	1. Genda Negeye	120	18
	2. Genda Haro	350	53
Ulanula	3. Genda Nole	180	27
	4. Genda Sukule	150	22
Total		800	120

Source: Own Survey, Sep, 2007

1.5.2 Data Collection Procedures and Sources of Data

In order to generate more reliable and complete information, the study employed three major data gathering methods and these were survey using questionnaires, focus group discussions and a key informant interviews. Before the survey was carried out a brief introduction was made to questionnaire administrators and a pre testing was under taken in Genda Negeye village of Kile kebele, in order to make necessary adjustments on the research tool. The target population for the survey was the population of both Ulanula and Kile kebeles. The survey covered 330 households in Ulanula and 470 household in Kile kebele. A total of 120 households were included in the sample survey. Two focus group discussions were also held the first in Ulanula and the second in Kile rural kebele with a group of knowledgeable people both men and women farmers to check and clarify issues raised in the questionnaire during the survey. Guiding questions like, issues of household characteristics, activity profile, food sources, marketing profile, household chores in relation to household food security, income sources, access and control over productive resources and decision making in the household were raised during the focus group discussions. Finally key informant interviews with government officials directly linked to the achievement of food security policy objectives at regional food security office level, at wereda food security desk level and also with kebele women association representative were also held to get indepth information on the issue.

During the key informant interviews, general discussion on issues of major livelihood activities of the area, wealth categorizing factors of the area and major economic activities of each group live, the poor, middles and better off groups on issues of their household size, land and livestock holding size was made. Further more, secondary source materials were also used.

1.5.3 Methods of Data Analysis

After collecting the data, items are then classified in different tables, and the data was analyzed and interpreted into descriptive statistics and categorized all the research variables in relevant and understandable manner with the help of statistical soft wares.(SPSS).

1.6 Scope of the Study

The study focused on the role of women (and men in order to compare) in household food security and limits it self on rural households of the Sofi and Erer Woredas of the Harari region. Besides, in order to come up with the actual picture, the study considers a normal year situation.

1.7 Organization of the Study

The study consists of five chapters. Chapter one deals with the background of the study, statement of problem. Objective of the study and Methodology. Chapter two describes the definitions of terms. theoretical frame work of the subject matter, and empirical and pertinent works that deal with the issue done so far. Chapter three illustrates the ecology and the economic base of the area where this study was under taken chapter four pulls together the major and various findings of the study by way of descriptive analysis and discussion finally chapter five deals with the conclusions that were driven from the major findings of the study.

CHAPTER TWO: LITERATURE REVIEW

This chapter reviews pertinent works that deal directly with the issue under investigation. The first part considers the conceptual definitions. This is followed by a review of the theoretical frame works on the issue of food security in line with identifying main shifts in thinking about the concept of food security. The last part deals with empirical works done so far and identifies the particular gap which this study attempts to fill.

2.1 Concepts

This study takes the World Bank's definition of Food Security given as "access by all people at all times of enough food for an active, healthy life" (World Bank, 1986). In contrast to food security, the term Food Insecurity is defined by Getahun(2003) as "lack of access to enough food both in quantity and quality on sustainable basis." Furthermore he notes that, household food insecurity takes different forms such as Chronic food insecurity where households are almost always short of food or Transitory food insecurity where it resulting from temporary adverse circumstance. On the other hand, the concept of Food availability and accessibility is described by Haregewoin (2003), as adequacy of food supply, stability of supply, without fluctuations or shortages from season to season or year to year. Whereas, accessibility to food as affordability through production, purchase exchange or gift. Gender is a socially constructed attribute that prescribes differentiated roles, responsibilities, expectations, norms and modes of behavior to men and women (Caroline, 1993). A Household is also defined as a concept that denotes a group of persons who often live in the same housing unit or in connected premises and have common arrangements for cooking and eating food (CSA, 1998). A household could consist of a single person, but usually it consists of a husband, his wife, children, relatives, etc.

2.2 Theoretical Framework

In the years since the World Food Conference of 1974, the concept of "Food Security" has evolved, developed, multiplied and diversified. At the last count, there were close to two hundred different definitions of the term (Smith et al., 1993). The history of thinking about food security since the world food conference can be conceptualized as consisting of three important and overlapping paradigm shifts, which have brought theory and policy progressively closer to "real" food insecurity (Hewitt de Alcantara, 1993).

The concept of food security has also been operationally defined in a number of ways by different organizations and institutions. One of the definitions of food security is that of World Food Conference of 1974. The final report of the world food conference defined it as "availability at all times of adequate world supplies of basic food stuffs...to sustain a steady expansion of food consumption....And to offset fluctuations in production and prices" (UN, 1975).

This definition leads directly to a focus on supply, to concern with national self-sufficiency and to proposals for world food stocks. Those early concerns live on today in the pre occupation of many governments, African in particular, with national food self sufficiency. Yet, it was clear from the out set that wide spread hunger could and did co-exist with the presence of adequate food supply at the national and international level (Harsch, 1992).

Many contributions were made by different scholars to bring the issue of access to food to center-stage. One of the important contributions was to codify and theorize the access question, give it a new name, "food entitlement", and demonstrate its relevance even in famine situations (Devereux, 1993).

As a result, it has been impossible since the early 1980s to speak credibly of food security as being a problem of food supply, without at least making reference to the importance of access and entitlement (Smith et al., 1993).

Recent research favors the view that access to food by individuals in a household is pervasively linked to the control they have over household resources and the access they have to household income (Evans, 1991).

Following this, one of the most cited and influential definitions of food security is that of world Bank's policy study, published in 1986. The Bank defined it as "access by all people at all times to enough food for an active, healthy life (World Bank, 1986).

Here the stress is on individual at the same time includes elements of availability (supplies of food), accessibility (both physical and economic) and utilization (physiological ability to absorb and utilize consumed nutrients) (USAID, 1997). This definition is very different to the one which emanated a decade earlier from the World Food Conference.

The conventional view of food security was of food as a primary need. The view was well expressed by Hopkins, who argued that "food security stands as a fundamental need, basic to all human needs and the organization of social life. Access to necessary nutrients is fundamental, not only to life per se, but also to stable and enduring social order" (Hopkins, 1986).

In recent years, however, it has been recognized that food, especially short-term nutritional intake, is only one of the objectives people pursue. Thus, de Waal (1989) found in the 1984/85 famine in Darfur, Sudan, that people close to go hungry to preserve assets and future livelihood: "People are quite prepared to put up with considerable degrees of hunger, in order to preserve seed for planting, cultivate their own fields or avoid having to sell an animal" (de Waal, 1991). Others have similar findings, particularly in the context of analyzing the sequence of coping or adaptive strategies people follow in times of draught (Frankenberger and Goldstein, 1990; Davies, 1993).

Hence, these findings reflect an issue of time preference: People going hungry now, in order to avoid going more hungry later. The upshot of these ideas is a view of food security which identifies livelihood security as a necessary and often sufficient condition for food security (Maxwell, 1991).

The more recent conceptual thought of food security views the conventional approach to food security to have some drawbacks because the conventional approach have relied on objective measurement which raises questions like how are the different aspects to be measured and weighted and who decides?. Therefore, these have led some observers to stress on the subjective dimension of food security (Smith et al., 1993). Moreover, it is not just the quantity of food entitlement that matters, but also the "quality" of entitlement (Frankenberger, 1992).

Furthermore, according to Maxwell and Frankenberger (1992), the concept of food security also has spatial and temporal dimensions. The spatial dimension refers to the degree of aggregation at which food security is being considered. It is possible to analyze food security at the global, continental, national, sub-national, village, household, or individual levels. The temporal dimension refers to the time frame over which food security is being considered. In much of the food security literature, a distinction is drawn between chronic food security, the inability to meet food needs on an on going basis and transitory food insecurity when the inability to meet food needs is of a temporary nature (Maxwell and Frankenberger, 1992). Transitory food insecurity is sometimes divided in to two sub categories: cyclical (where there is a regular pattern to food insecurity, for example the "lean season" that occurs in the period just before harvest); and temporary (which is the result of a short-threat, exogenous shock such as drought or floods) (Hoddinott, 1999).

While food security is traditionally viewed as having these two dimensions-spatial and temporal, infact, it has three, with gender being the third and most over looked (FCND, 1999).

Gender affects the distribution of resources, wealth, decision making and political power and the enjoyment of rights and entitlements within the family as well as public life (DAW, 1999). Identifying individuals differential access to resources and benefits is the fundamental feature of gender analysis, and ensuring equitable access and distribution will enhance food security.

Research and field experience have clearly illuminated the different roles and responsibilities that men and women have in their individual lives, in their families and households, and in their communities. While both men and women are income earners and agricultural producers, women also process and prepare food, and use their income for their children's benefit. They take children to health services, and ensure healthy, environment-the very component of good nutrition (Levin et al., 1999).

2.3. Empirical Literature

2.3.1. Status of Rural Women in the Household

In sub-Saharan, women head 31 percent of the households (FAO, 2003). The de jure female headed households are about 20-25 percent of the land owners of Ethiopian (CSA, 1994). Although there is no official figure given to the de facto ones (this is common in a polygamous area), one can use a very conservative estimate to make it around 10-15% (Addis, 2000). The major implication is that about 35-40% of the land in Ethiopia is mainly managed by women farmers. About 70% of de jure ones are involved in mixed farming where crop production is major activity and the livestock playing a complementary role. On the other hand, about 25 percent of them are doing animal husbandry. Thus, women do 50-60 years of the agricultural activity in Ethiopia (Addis, 2002).

2.3.2 Role of Women in the Attainment of Household Food Security

The socio economic role of women throughout rural African and else where is crucial. It is estimated that women are responsible for about 70% of staple food production, as well as for household management, child care, gathering wood drawing water, and pounding grain, among other household (Deborah, 1995). Rural women play multiple roles in the world's agricultural systems. Ethiopian women are involved in the entire range of agricultural activities, with the exception of land clearing and preparation (tree-felling and ploughing) which are tasks usually performed by men. They are involved in planting, weeding, harvesting, threshing, processing and storing and marketing farm products (Haregewoin, 2003). Women are also a critical component of rural economy and are engaged in agricultural production\, cash and food crops (FDRE, 2007).

On the basis of gender divisions of labor within the household, women have triple roles (Caroline, 1993). First, the reproductive role, the child bearing and rearing responsibilities, required guaranteeing the maintenance and reproduction of labor force second the productive work, often as secondary income earners and finally, women also under take community managing work around the provision of items of collective consumption, under taken in the local community in both urban and rural (Caroline, 1993).

Consequently, with regard to food security there is sufficient evidence to show that women play a key role in household food security. Their role has been recognized by all publications reviewed here, and this has been most extensively described in McGurie and Popkin (1990). Women play three key roles in the context of household food security. Firstly women are producers of food and income earners. Secondary as mother they bear and raise their children and thirdly through their role in overall household production (i.e.cleaning, food preparation)(Caroline, 1993).

Similarly, it is equally important to view the role of women from the three central ingredients or pillars of food security. These are food availability, or adequate food production; economic access to available food production; and nutritional security (Caroline, 1993). Nutritional security depends on the availability of non-food resources such as child care, health care, clean water and sanitation.

Sustainable production of food is the first pillar of food security. In every region of the developing world, but perhaps most in Africa, millions of women work as farmers, farm workers, and national resource managers. In doing so, women contribute to national agricultural output, maintenance of the environment and family food security. Estimates from FAO show that women account for more than half of the labor required for producing the food consumed in the developing world, and perhaps three fourths in Sub-Saharan Africa (FAO, 1985). Aggregate data suggest that African women perform about 90% of the work of processing food crops and providing household water and fuel wood, 80% of the work of storage and transport from farm to village, 90% of the work of hoeing and weeding and 60% of the work of harvesting and marketing (World Bank, 1989).

The second pillar of food security is economic access to available food. A household's access to food depends greatly on its real income. In recent years, a number of studies have shown that improvement in household welfare depends not only on the level of household income, but also on who earns that income. These studies found that women, relative to men, tend to spend their income disproportionately on food for the family. (Haregewoine, 2003; Addis, 2002).

Moreover, women's incomes are more strongly associated with improvements in children's health and nutritional status than are men's incomes (IFPRI, 1995).

Women's decisions to engage in income earning activities involve complex trade offs, and the ultimate effects of women's employment on the nutrition security

depends on the specific setting. Sufficient evidence supports the argument that women's employment, especially for low-income households, may be good not only for the women welfare, but also for the rest of the household member (Haddad, 1992).

A number of studies conducted during the 1980s suggest that men and women spend income under their control in systematically different ways. Women typically spend a high proportion of their income on food and health care for children, as well as other goods for general household consumption. In contrast, men retain discretionary control over a higher proportion of their own incomes for personal expenditures (IFPRI, 1995). Evidence from Africa, Asia and Latin American shows that women's income has a greater effect on household food security and pre schooler nutrition than men's income.

To conclude, women play significant, if not dominant, roles in supplying all these ingredients necessary to achieve food security in developing countries. But women play these roles in the face of enormous, social, cultural and economic constraints (IFPRI, 1995). Hence the study also tries to depict the most over looked but very important roles constraints faced by women in the course of maintaining food security situation in the study area in particular and harari region in general

2.3.3. Constraints Faced by Women in their role of Maintaining Household Food Security

Women are producers preservers and processors of food but are ill equipped and underfed besides; the neglect of women in agriculture education and health sectors has been and continues to be one of the fundamental cause of food in security (Haregewoign, 2003).

Despite women's importance in agricultural production, they usually have lower levels of physical and human capital than men. Their limited access to resources and their insufficient purchasing power are products of interrelated

social, economic and cultural factors that face them into a subordinate role, to the detriment of their own development and that of the society as a whole (FAO, 2003). Therefore, their role as the backbone of food production and provision for the family in developing countries, women remain limited in their access to critical resources and services. While in most developing countries, both men and women farmers do not have access to adequate resources; women's access is even more limited due to cultural, traditional and sociological factors (FAO, 2003). As a result, these constraints that either limit their participation or results in their working under inferior conditions with low productivity can be listed among other.

2.3.3.1 Access to Land

Women own not even 2% of land, while the proportion of female-heads of household continues to grow land reform programs together with the break up of communal. Land holdings have led to the transfer of exclusive land rights to males as heads of households and the rights of married women to a joint share (FAO, 2000). According to FAO one of the most serious obstacle to increasing the agricultural productivity and income of rural women is their lack of security of tenure. Although women are one of main food producers and providers to sustain the livelihood of the family, they have limited access to and control over means of production (Mulunesh,2001).

The World Bank estimates that in all zones about one-third of land holdings in Africa are below the calculated poverty threshold size. Women's land holdings as percentage of total agricultural holdings relative to men ones are too small. This situation is a serious impediment to improving household food security and family welfare. For them the situation is even more critical; faced with uncertain tenure and the decreasing size and quality of plots to farm, women have an exceptionally difficult task in maintaining levels of output and household food security (Saito et al., 1994: 46, 51).

In order for women farmers, who are responsible for 60 to 80% of the food production in developing countries, to use land more effectively and thereby make a great contribution to food security, they need access to land, management control of land-based resources and economic incentives that security of tenure provides (FAO, 2003).

2.3.3.2 Access to Credit

In most rural areas, there is no credit institution, absence of all forms of cooperatives, weak marketing institutions specially input and output market (Haregewoign, 2003). Even where credit services are available, credit could only be extended to individuals with land titles and other collateral (MOA, 2002). Rural women's limited incomes, lack of collateral, higher levels of illiteracy and lack of information drastically constrain their access to almost all forms of credit from financial institutions and government agencies (FAO, 1990b:8). Thus women access to and control over the land could give the women an opportunity to have access to credit because they could fulfill collateral requirement of lending institutions to purchase agricultural inputs that is required to improve food production (Mulunesh, 2001). An analysis of credit schemes in Kenya, Malawi, Sierra Leone, Zambia and Zimbabwe found that women receive less than 10 percent of the credit directed to small holders and merely 1 percent of the total credit to agriculture (FAO, 1990b:8).

2.3.3.3. Access to Education, Training and Extension Services

Two-thirds of the one billion illiterate in the world are women and girls. Available figures show that only 5% of extension services have been addressed to rural women, while no more than 15% of the world's extension agents are women. In Africa, only 7 percent of agriculture extension services were directed to women farmers in 1989 and only about 11 percent of all extension personnel were women (FAO, 1989).

In addition, most of the extension services focus on cash crops rather than food and subsistence crops, which are the primary concern of women farmers and the key to food security (FAO, 2003). Ethiopian women are also involved in all aspects of agricultural and livestock production except in ploughing. Nonetheless, they lack adequate access to extension services (MOA, 2002). Moreover, rural Ethiopian men farmers are encouraged to promote their agricultural outputs through provisions of new technology, information on marketing and credit facilities but women farmers are excluded from agricultural research and extension programs (Mulunesh, 2001).

Various studies have shown that market opportunities and transport facilities can stimulate women farmers to produce food surpluses, equal participation of women in production and marketing cooperatives play a significant role in encouraging women farmers to produce surpluses for markets and thus augment the household income and contribute to improving the food security situation. Furthermore, women need training in marketing, accounting and management skills (FAO, 1990 b: 11).

2.3.3.4. Access to Decision Making

Women's decision making capacity with regards to household income allocation on family food, and the ability to decide on family planning have a significant impact on food security of the household (Haregewoign, 2003).

Traditionally women have limited role in decision making processes and laws, which are important for poverty reduction, food security and environmental sustainability. The causes of women's exclusion from decision making are closely linked to their additional reproductive roles and their household work load, which account for an important share of their time. In rural areas of selected developing countries women work burden on average has been estimated to be 20% more compared to men (UNDP, 1995a).

The productive work done within the household by women has been ignored and not much attempt has been made to incorporate in the value of such activities within the national accounts. The degree of error is even more pronounced within the developing countries context with a large agricultural sector where large percentage of goods and services consumed within the households are produced at home. In developing countries, share of women's total time devoted to all economic activities is 53% but only 34% of women's work are included in the national accounts, while 76% men's work are in national account. Thus most of the women's work still remains unpaid and unrecognized (UNDP, 1995a). Although rural women are heavily involved in almost all aspects of agricultural production, it emerges from the scant data available that their share in decision-making is not commensurate with the amount and type of work they shoulder (FAO, 1995a).

2.3.3.5. Access to Research and Appropriate Technology

Women have little access to the benefits of research and innovation, especially in the domain of food crops, which in spite of ensuring food security at the household and community levels, have a low priority in crop improvement research. In addition, women farmers' roles and needs are often ignored when devising technology that may cause labor displacement or increased work load (FAO, 2003).

2.4 Summary

Even though women role are the main food producers and providers their critical contribution to household food security is only now becoming recognized (FAO, 2003). FAO studies confirm that while women are the mainstay of small scale agriculture, farm labor force and day to day family subsistence, they have more difficulties than men in gaining access to resources such as land, credit and productivity enhancing inputs and services. Given women's crucial role in food production and provision any set of strategies for sustainable food security must address their limited access to productive resource (FAO, 2003).

On top of the above, this study defines food security as “access for all people at all times of enough food for an active, healthy life” and uses a conceptual framework that includes three components of food security availability, accessibility and utilization of food as a guide (figure 2.1). The study focuses on women (and men in order to compare) and their roles in household food security. Finally, while noting that food “availability” is result of domestic food production, imports, and donations, the study focuses principally on domestic agricultural (including livestock) production.

Figure 2.1 out lines the food security framework of the study, highlighting the three dimensions of availability, access and utilization, and the nature of their relationships to one another, as well as a brief description of their determinants.

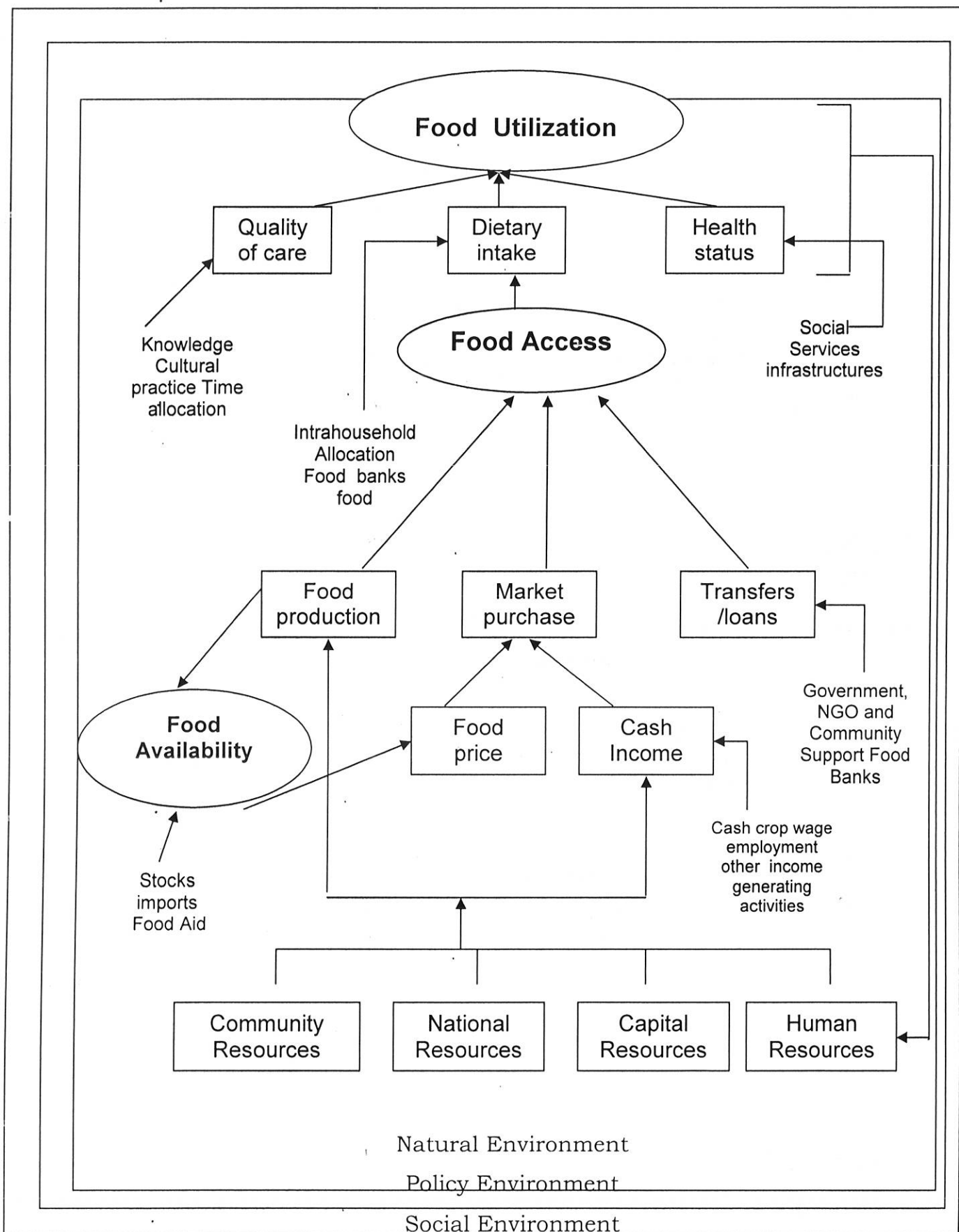


Figure 2.1: Title: Food Security and Framework of use in the Monitoring and Evaluation of Food Aid Programs.
 Source: Adapted from Riely, et al., (1999)

As indicated in the (Figures 2.1), food availability is a function of the combination of domestic food stocks, commercial food imports, food aid and domestic food production, as well as the underlying determinants of each of these factors. The term food availability is confined to food supplies available at the household level.

Food access is influenced by the aggregate availability of food through the latter's impact in the market and, therefore, on market price. Again, (Figure 2.1) indicates that access is further determined by the ability of households to obtain food from their own production and stocks, from the market, and from other sources. These factors are, in turn determined by the resource endowment of the household, which defines the set of productive activities they can pursue in meeting their income and food security objectives.

Food access also is the function of the physical environment, social environment and policy environment, which determine how effectively households are able to utilize their resources to meet their food security objectives.

Food utilization, which is typically reflected in the nutritional status of an individual, is determined by the quality and quantity of dietary intake, general child care and feeding practices, along with health status and its determinants. Regarding this component the study confines on household level (only dietary intake).

CHAPTER THREE: DESCRIPTION OF THE STUDY AREA

The description of the Bio-physical aspect and the socio economic base of the study area in this chapter establishes the context in which women and men farmers attempt to gain access to adequate food supplies. The chapter first illustrates the general location map of the study area and then characterizes the various bio-physical setting of the study area where aspects of topography and climate are emphasized. Finally the description of the socio-economic base of the area under study follows.

3.1 Location

Harari People Regional State is one of the regional states of the Federal Democratic Republic of Ethiopia. The Harari People National Regional State is located in Eastern part of Ethiopia, at a distance of 510 km from Addis Ababa. With a total area of 343.2 Square kilometers, it is the smallest region in the Federal State of Ethiopia. The region boarder with some Woredas of the Eastern Zone of Oromia Regional State; Kombolcha and Jarso in Northern, Gursum & Babile in the east Alemaya in the West and Fedis in the south.

Harari Regional Atlas

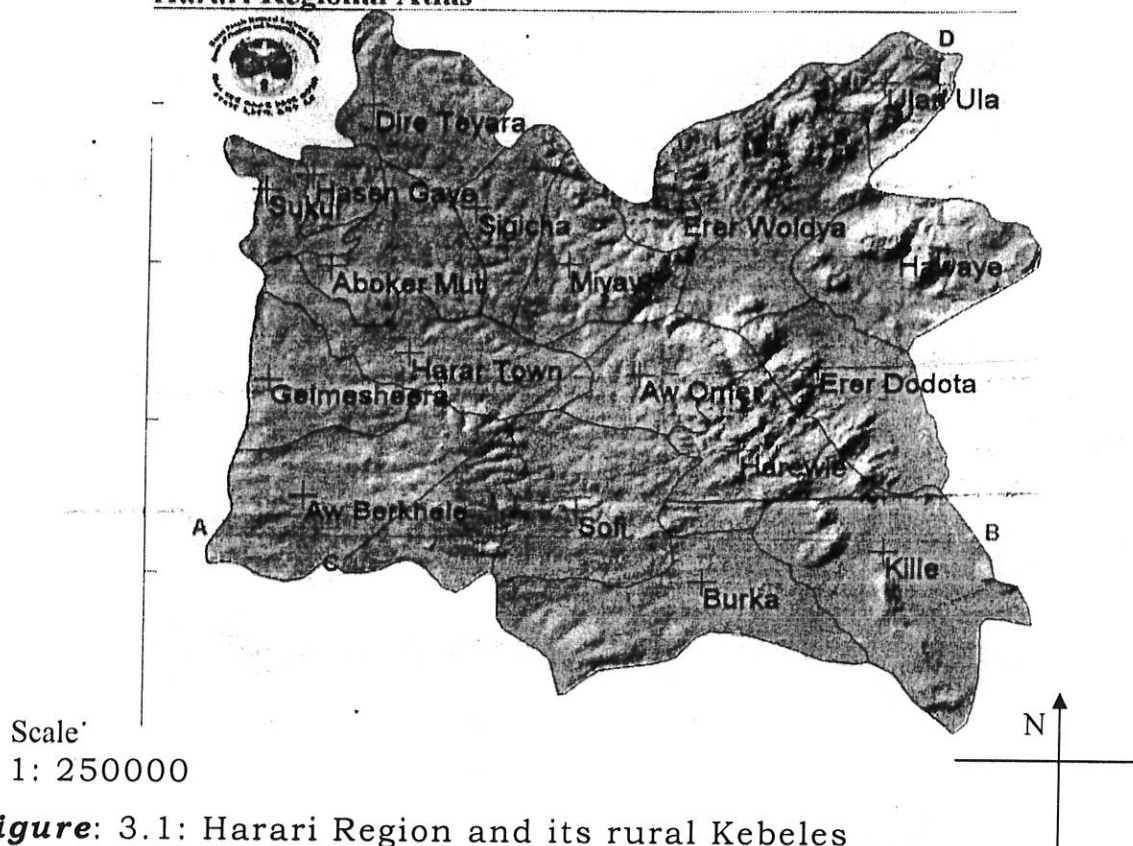


Figure: 3.1: Harari Region and its rural Kebeles

Source: Digitized Map Shown above is produced from top sheet 774411 prepared & published by the Defense mapping agency". Topographic center, Washington DC. and Boundaries from Land Capability Map of Harari Region.

3.2. Bio-Physical Aspect

3.2.1. Topography

The region is situated in the eastern wing of the Hararghe highlands, which together with the Chercher Highlands constitutes the eastern Ethiopian highlands. The Hararghe highlands are defined here as the part of the eastern Ethiopian highlands covering areas west and south-west of Chelenko town up to the east and north-east of Kundudo mountain in the eastern margin. Thus, in accordance with the Hararghe highlands, the general topography of the Harari Region is dominated by mountainous and undulating land forms. More specifically, the region is characterized by widely varying topographic and relief features including rugged terrain, steeply sloping hills and mountainous landscapes and geomorphologic features as well as valley bottoms. These

topographic and relief features collectively govern the regional geomorphologic features, agro-ecological zones, soil toposequence, natural vegetation and/or types of plants and animal lives in the region. (BOFED, 2001).

Topographically, the region is divided in to highlands and lowlands (valley areas) with elevation ranging from about 1300 to 2200 meters above sea level (masl) falling in slope gradient gradually towards the south east direction of the region. The lowest elevation of about 1300-1350 masl occurs at the lower part of the Kille PA in the Erer Valley which is located at the southeast edge. On the other hand, the Aw-Hakim Mountain located at the southern margin of the region forms the highest peak (2200 masl) of elevation (BOFED, 2001).

According to the Harari Regional Atlas Regional only 3670 ha (10.7%) fall in lowlands and the remaining 30650 ha (89.3%) fall under highlands (Table 1). Based on the altitudinal positions and ranges indicated above, the Aw-Hakim-Beke Kalu Mountain ranges and the Erer Valley which constitute the topographic highs and the topographic lows, respectively, are the major physical (relief) features of the Harari National Regional State. The topographic highs are characterized by undulating upland plateaus and steeply slopping to undulating erosional hills and foot-slopes whilst the topographic lows are characterized by plain physiography with gently slopping to nearly level and/or level depositional slopes (PEDB, 2000).

Table 3.1. Estimated area coverage falling in different altitudinal zones and climatic zones

Altitude (masl)	Altitude class	Area coverage (ha)	Area (%)	Climatic zone
1200-1400	Very low	3670	10.7	Kola
1401-1600	Low	7830	22.8	Kola/Weina Dega
1601-1800	Medium	7960	23.2	Weina Dega
1801-2000	High	9140	26.6	Weina Dega
> 2000	Very high	5720	16.7	Weina Dega
Total		34320	100.0	

Source: HPNRS, Planning and Economic Development Bureau (PEDB), 2000.

3.2.2. Climate

The rainfall in the region has a weak bi-modal pattern. The first peak is in April-May while the second and main peak occurs in July-August. Generally, rain falls from April to October, with the months of June to September contributing a little above 50% of the total annual rainfall. The months of November to January are usually dry periods (HPNRS, 1999).

According to the HPNRS (1999), there are variations in the annual rainfall with 880 mm near Alemaya, 859 mm at Harar town and 721 around Babile. Based on nine years rainfall data recorded at Harar, the mean annual rainfall is 669 mm (Karamara 2, 2000). According to same, the annual rainfall is highly variable ranging between 275 to 1000 mm.

The mean annual daily temperature at the Harar Weather Station is 19.2 °C, while the annual mean minimum and mean maximum daily temperatures are 13.0 and 25.2 °C, respectively. The warmest months are February to May while the coldest months are November, December and January. Variation of monthly temperature in the region is more or less even, which account for its pleasant climate. The mean monthly temperature fluctuation (based on five years data for Harar) is between 18 and 22.2 °C. The length of growing period in four out of 5 years is 94 days which increases to 135 days in five out of ten years (HPNRS, 1999).

3.3. Socio- Economic Base

According to the projection from the 1994 census, the total population of the region is estimated to be 189,511 by year 2005 with sex ratio of 49.1% female and 50.9% male. The population size of the region is estimated to be 196,000 by July 1, 2006 (BOFED, 2006). The region is the smallest in terms of population size and land area. The settlement pattern of the region is different from that of other regions of the country where 62% of the population reside in urban area.

The average gross population density of the region is estimated to be 552 persons per KM²; while the average estimated gross density is 6012.4 per KM² and 222.5 per KM² for urban and rural respectively (CSA, 1999).

Moreover as indicated in CSA, analytical report of 1999, there is a variation in the rate of annual population growth among regions of Ethiopia. For the period 2000-2005 the highest annual rate of population growth was in Dire Dawa (40%) followed by Harari region 13.4 percent per year (which is quit greater than the country's total percent. These figures show that the region is endowed with pull socio -economic factors for in migration. According to the regional baseline, data report, (2006). The major push factor that force people to leave rural areas in Harari region are scarcity of agricultural land and other natural resources due to increase in rural population size and improper utilization of resources, forest and soil since the size of the region is very small poverty of rural people due to various socio economic crises and environmental crises and its consequence of famine and drought.

Furthermore, according to the data obtained from Harari Regional Bureau of Agriculture and Rural Development (2006), 10 rural kebeles of the region are continuously victim to drought average annual people affected by brought in the last three years are 24, 684. According to the report, some of the major factors for the drought in the region are.

- shortage of farm land
- decreasing fertility of land.
- deforestation
- shortage of rainfall distribution and
- non improved traditional farming

The economy of the region is dominated by primary and tertiary sectors. According to the data of 1994 census, agriculture and related sector contribute for about 50 percent of total employment. While social, cultural, administrative activities, trade, manufacturing, transport and other related sectors account for the remaining employment (BOPED, 2001).

Health service coverage of the region is estimated to be 77.6 percent as of 2005. The gross primary school enrollment/coverage rate is 99.07% as of 2005. The region is connected by all weather roads and most rural areas are also accessible in most parts of the years (BOPED, 2001).

According to data obtained from Demographic & Socio economic Profile of Harar, 2001, the total area of the region is 34,050 out of the total area, the total cultivable land is estimated to be about 14518 hectares (42 percent); of which 11220 hectares are under the temporary crops and 3,295 hectares are under the permanent crops. On the other hand, about 17965 hectares (about 52 percent) of the total land area of Harari Region is not suitable for agriculture. Mixed farming is the major agricultural characteristics of the region. A typical household in the rural area may grow food crops sorghum, maize, horticultural crops etc. The major annual crops of the region are sorghum, maize, wheat groundnut, etc.

The livestock population in rural areas of the Harari region is estimated at 31732, 3438 and 26909 head of cattle, sheep and goats respectively (DPPD, 1998; PEDB, 2000). Cattle comprise 55% of the total livestock population. An estimated 6316 donkeys and 630 camels were in the region in 2004/05 with a poultry population of 31426 (CSA, 2005).

3.4. Summary

The Harari region is the smallest in terms of population size and land area. The region is also characterized as the most densely populated with high number of persons per square kilometer. This is because of the high natural population growth rate and the high rate of in-ward migration from the neighboring region. Moreover, the high rural population growth has brought different problems like scarcity of agricultural land, improper utilization and managements of resources such as forest and soil, which in effect expose the rural people of the region to various socio- economic and environmental crises.

CHAPTER FOUR: DATA ANALYSIS AND DISCUSSION

This chapter gives the analysis and discussion part of the study and summarizes the major findings of the survey. First, the chapter starts by illustrating the general socio-economic characteristics of the sample households and goes on to highlight some of the activities; women perform to maintain the household food security situation. Then, it briefly views using gender analytical framework the activities women and men perform specifically agricultural and marketing activities and also tasks related to household income source and expenditure pattern man and women. Finally the chapter ends up by investigating some of the factors and constraints faced by women in achieving the household food security situation.

4.1. Socio-Economic Characteristics of the Sampled Households

Food availability and accessibility in a household depends upon various socio-economic factors. These factors directly or indirectly determine the household food security status in general. Hence, the study focused some of the relevant socio-economic characteristics of the sampled households in this regard.

4.1.1. Household Size

Household size is related to a household food security as it determines the labor availability for productive activities in the household. Similarly, the size of a household also indicates individuals' access to the available food in the household and thus their nutritional status.

The household sizes of the sampled households show variation. The minimum household size is 2 and the maximum is 13. The average family size of the sampled households is 6. Accordingly, 66% of the households have household sizes that range from 2-6 persons. Cumulatively, 97% of the sampled households have 2-11 household sizes.

This shows that the majority of the sampled households have larger family size (five and above) which indicates the knowledge of the sampled households to the family planning is very less which in turn results in poverty. Since in most cases family size and poverty are related.

4.1.2. Marital Status

Table 4.1. Distribution of the sampled households by marital status.

Village	Marital status					Total
	Widowed	Divorced	Separated	Married		
				Monogamous	Polygamous	
Negeye	1	1	1	22	3	18
Haro	5	2	-	30	16	53
Nole	1	1	1	13	11	27
Sukule	3	-	-	14	5	22
Total	10	4	2	79	35	120

Sources: Own Survey, Sep, 2007

Marital status defines a household structure that in turn verifies the household food economic status as male-headed and female-headed households position in food security differ.

Table 4.1 above indicates that households are heterogeneous in terms of household structure. Mainly, the results verify the prevalence of the two main types of female headed households. These are defacto and dejure female-headed-households consequently, Nole village leads in defacto female-headed households in which 41% of its households reflect this household type. Similarly, Negeye village households reveal 17% in dejure female-headed household. As a whole, 29% and 13% of the sampled households are characterized with defacto and dejure female headed household respectively.

4.1.3. Gender

Table 4.2. Percentage distribution of the sampled households by age and gender.

Age	Male	%	Female	%	Total	%
Up to 6	94	13	79	11	173	23.9
7-15	121	16.7	105	14.5	226	31.3
16-30	38	10.8	97	13.4	175	24.2
31-45	62	8.5	48	6.6	110	15.2
46-50	27	3.7	8	1.1	35	4.8
>51	2	0.3	1	0.1	3	0.4
Total	384	53	338	47	722	100

Source: Own Survey, Sep, 2007

The size of gender compositions in a household determines the labor availability for the agricultural activities and the various activities in the household. As a result, this is related to the household food production and processing. In this respect, the sampled households seem to be nearly equal in its gender compositions. Hence, among the total persons living in the sampled households men and women account 53% and 47% respectively as Table 4.2 above indicates.

4.1.4. Age

A household age structure is an indicator of the presence of productive age group in the household. Households with young age group are expected to have better productivity provided that they have sufficient productive enhancing resources (other things being constant).

In terms of age, the sampled households show differences in age groups. In all villages the data verify the concentration of individuals within the young age groups. In view of that, the predominance of young age structure is proven by the fact that 56% of the sampled households are less than or equal to 15 age groups which clearly shows the prevalence of high fertility rate in the study area in the near future. Under this circumstance depleting natural resource with high rural population growth will have severe effect on food shortage Furthermore; the maximum age of the sampled population is 80.

4.1.5. Education

Table 4.3.a.Percentage distribution of the sampled households by age and educational status.

Age	Educational Status												
	Illiterate	%	Read and write	%	1-6	%	7-8	%	9-12	%	12 Complete	%	Total
7-20	154		54		78		2		2		-		290
21-45	175		16		7		3		-		2		203
>46	30		3		4		-		-		-		37
Total	359	67.7	73	13.8	89	16.8	5	0.9	2	0.4	2	0.4	530

Source: Own Survey, Sep, 2007

Table 4.3.b Distribution of the sampled households by age and number of illiterate members of the household in each village

Number of Illiterate members of the Household in each Village					
Age	Sukule	Negeye	Nole	Haro	Total
7-20	25	29	40	60	154
21-45	33	23	41	78	175
≥46	7	1	9	13	30
Total	65	53	90	151	359

Source: Own Survey, Sep, 2007

Education is positively and negatively correlated to household food economy. For one thing, with available educational opportunities such as skill training for a household members particularly for women could improve the household income and hence food security. For another, in food insecure areas households would not be tempted to send their children to schools even if the service is there. This is due to the fact that children would be much engaged into the different household food production activities.

Of the total population of the sampled households 530 persons are within the range of school going age. The data show high rate of illiteracy. The numbers of illiterates are all significant in the four villages. Table 4.3 shows that 67.7% of the sampled households are illiterate, only 13.8% can read and write. Moreover,

16.8% and 1% have attended primary and junior secondary schools respectively. Only, less than 1% has completed 12 grades. Therefore, in terms of education the results even disclose the under development of traditional learning in the study area.

4.1.6. Major Occupation

The nature of a household economic activity entails the sustainability and reliability of the specific household food economic option. Besides, it implies the possible vulnerability of the household to food insecurities in the pursuit of its economy.

In light of this, when the sampled households are disaggregated into major economic activities, the agricultural activities take the lead. Eighty five percent of the total sampled households depend on agricultural activities. On the other hand, 14%. Of the sampled households pursue agricultural and non – agricultural activities (such as small business across villages). Only 1% of the sampled households relies on other (government employee) as major economic activity as Table 4.4 below indicates.

Table 4.4. Distribution of the sampled households by major occupation.

Villages	Major Occupation			Total
	Agricultural activities	Agricultural and Non agricultural activities	Government employee	
Nole	21	5	1	27
Sukule	16	6	-	22
Haro	49	4	-	53
Negeye	16	2	-	18
Total	102	17	1	120

Source: Own Survey, Sep, 2007

4.1.7. Land Holdings Size

The size of land ownership is strongly linked to a household food security status. A household with enough cultivable land yields more produce, when all other things remain constant. Moreover, this can indicate the degree of the household dependability on its land as a source of livelihood mainly food.

4.1.7.1. Cultivable Land Holdings

The land holding size of cultivable lands varies across the sampled households the study shows that only one household is landless. The average cultivable land holding size is 3.41 Koti and about 28% of the sampled households have this, land size. The maximum cultivable land holdings size is 11 Koti and only one household has land holding of this size (Table 4.5).

4.1.7.2. Non- Cultivable Land Holdings

With regard to non-cultivable land holdings, only 31 households have non-cultivable lands ranging from minimum of 1 Koti to maximum of 7 Koti. Seventy-four percent of the sampled households do not have non-cultivable lands. The average land holding size of the non-cultivable land is 2.32 Koti. The main use patterns of the non- cultivable lands are chiefly for grazing and homestead. Sixty-five percent and 35% of the sampled households use the cultivable lands for grazing and homestead respectively.

Table 4.5. Percentage distribution of the sampled households by cultivable land and non-cultivable land holding size in koti¹.

Cultivable land size in koti	Frequency	Percent	Non-cultivable land in koti	Frequency	Percent
0-3	69	57.5	0-3	112	93.3
4-7	49	40.8	4-7	8	6.6
8-11	2	1.6			
Total	120	100.0	Total	120.00	100.0

Source: Own Survey, Sep.,2007

4.1.8 Major Types and Size of Livestock Holdings

The size of live stock owned is not only important for a household food requirement but also it is a potential source of income for the household. This improves the household purchasing power in terms of food.

¹ Land Holding size is determined in terms of koti. One koti measures 22 square alternative steps and about six koti constitute one hectare.

Table 4.6: Percentage distribution of the sampled households by the number of Cattle (Oxen, Cows) Camels, Goats and Sheep owned

Kebeles			
Number of cattle	Kile	Ulanula	Percent
2-5	71	48	99
6 and above	-	1	0.8
Total	71	49	100
Number of oxen	Kile	Ulanula	Percent
No oxen	12	10	18.2
1-3	59	38	81
4 and above	-	1	0.8
Total	71	49	100
Number of cows	Kile	Ulanula	Percent
1-2	54	39	77.5
3-4	17	10	22.5
Total	71	49	100
Number of Camels	Kile	Ulanula	Percent
No camels	58	40	82
1-3	13	9	18
Total	71	49	100

Number Ruminants	Kile	Ulanula	Percent
No ruminants	5	10	12
1-4	29	27	47
5-9	24	8	27
10-14	11	-	9
15 and above	2	4	5
Total	71	49	100

Source: Own Survey, Sep 2007

Regarding, the cattle ownership 99% of the sampled households have 2-5 cattle. Only, one percent of the household has 6 and above number of cattle (table 4.6).

Concerning cows and oxen ownership the data reveals that 18.2% of the sampled households have no oxen while 81% have 1-3 numbers of oxen and only 0.8% of the sampled households possess 4 and above number of oxen. With respect to cows ownership the data shows that every household has a minimum of one cow. In addition, 77.5% of the sampled households have 1-2 numbers of cows while the 22.5% have 3-4 numbers of households. The ownership of cows and oxen is considered as a sign of wealth by the rural community in the four villages where this study is undertaken. The rural household with more cows and oxen can have the ability to cope up when they face temporary food insecurity situation either by selling so that to get the income and to buy food or by consuming these cattle. With respect to goat and sheep ownership 12% of the sampled households have no goats and sheep while 47% have 1-4 numbers. Besides, 27% and 9% of the households have 5-9 and 10-14 numbers of goats and sheep respectively. Above and beyond, 5% have 15 and above numbers of goats and sheep.

Regarding camel ownership the majority of the sampled households (82%) have no camels. Only, 18% have 1-3 numbers of camels.

4.1.9 Major Crops Grown

The types of crops grown by a household determine the nature and orientation of its economy. As a result, whether a household is dependent on subsistent mode of production of crops or marketable ones can be identified. This in turn indicates the socio-economic position of the household and its food security status in particular.

The major crops grown are sorghum, maize, chat and fruits (mainly, mangoes and bananas). Though all households grow these crops, there is variation in terms of their importance among the households. Eighty-five percent of the sampled households grow sorghum as first major crop. While, 7% grow maize as first major crop. Besides, 7% and 2% of the households grow fruits (banana and mango) and chat as first major crops respectively (Table 4.8).

Table 4.7. Percentage distribution of the sampled households by first major crops grown

First major crops grown	Frequency	Percent
Sorghum	102	85
Maize	8	6.7
Chat	2	1.7
Fruit	8	6.7
Total	120	100

Source: Own Survey, Sep 2007

4.1.9.1. Cereal Production

The two major cereal crops (sorghum and maize) grown are produced in different quantities. These crops are harvested once in a year. The minimum quantity produced is 1 quintal and the maximum is 16 quintals (of both crops). The average quantity of cereal production (sorghum and maize) is 4.5 quintals and about 61.3% of the total households produce less than this amount.

Table 4.8. Percentage distribution of the sampled households by amount of cereal (Sorghum and maize) produce.

Amount in quintal	Frequency	Percent
1-4	73	61.3
5-8	35	29.8
9-12	5	4.2
13-16	6	4.9
Total	120	100

Source: Own Survey Sep, 2007

Since households' production is not sufficient for consumption, a significant amount of cereals (sorghum) are purchased. The amount and frequency of cereal purchase vary across the households. This depends on the household size and the amount produced. Among the sampled households, 108 households purchased cereal (only sorghum) in different quantities and duration during the last twelve months.

4.1.11. Food Sources

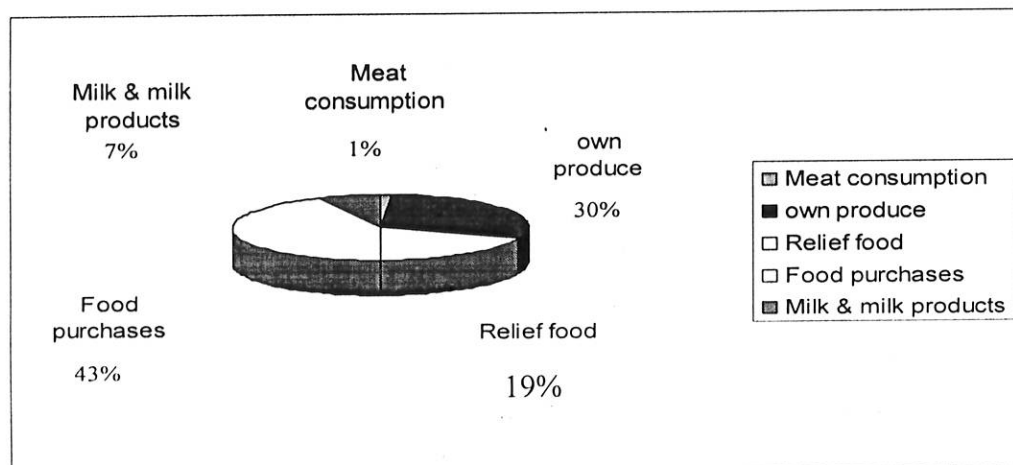
The identification of a household's sources of food and the relative amount each source cover the household needs is a good indicator of the household's food security. The reliability and sustainability of each source is an important tool for forecasting household vulnerability to food insecurities. The major sources of food for the sampled household are from different sources. Mainly, these are from own production (cereal- sorghum and maize), milk and milk products, meat, food purchases and relief food.

In consequence, households get differential, amounts of their food requirements from these sources. This can be easily seen from the average amounts households cover their annual food requirements from each sources (Figure 4.1).

Households meet maximum average amounts of their food needs from food purchases and own produce that cover 43% and 30% of the households' annual food requirements respectively. Additionally, relief foods are also significant sources in which 19% of the households' food requirements are met. Over and above, 7% of households food needs are covered from milk and milk products. Only 1% of the households' food requirements are covered from meat consumption (animal slaughter).

This shows that the sampled household are not food self sufficient and also the inability of the sampled households to produce enough food to feed their family. Therefore, this situation has led the sampled household to purchase greater amount food in order to cover their food demand. Moreover, the data revealed that among the sampled households day to day food in take items, the more nutritious food items are in a very less amount which probably leads members of the family to be exposed to malnutrition.

Figure 4.1. Percentage distribution of the sampled households by annual average amount of food acquired from the different sources



Sources: Own Survey, Sep. 2007

4.1.12 Sources of Water and Energy

Water is a basic need for a household food security. A household with less access to reliable water source is often vulnerable to food insecurities. In the same way, the type of energy and the usage intensity of that particular type by the households is related to crop productivity and the availability of pasture in the locality and hence this may exert negative impact on the household food economy. Because, environmental or soil degradation might be the consequences.

The sources of water in all villages is from rivers springs and deep water holes. Hundred percent of the sampled households get water from this source. On the other hand, with regard to source of energy, there is a slight variation among the households: 90% of the households get energy from forest while 8% get from the market. Furthermore, 2% of them get energy from own plantation (Table 4.10).

Concerning the use of fuel wood collected from the forest, 95.8% of the households collect fuel wood for household energy consumption, where as 4.2% use it for both cooking and for sale (Table 4.10).

Table 4.10. Percentage distribution of the households by sources and use of fuel wood collection

Sources of energy			Purpose of fire Wood Collection		
Sources of energy	Frequency	Percent	Purposes of fire wood collection	Frequency	Percent
Forest	108	90.0	Household energy consumption	115	95.8
Market	10	8.3	Household energy Consumption and for sale	5	4.2
Own plantation	2	1.7			
Total	120	100.0	Total	120	100.0

Sources: Own Survey, Sept. 2007

In summary, all these parameters are important criteria of the households' relative socio economic position. Over and above, they are essential determinants in estimating the status of the food security of the sampled households. At the same time, they are good indicators in forecasting the households' vulnerability to food insecurities in the long run.

4.2. The Roles of Women in Household Food Security

4.2.1. Domestic Chores

The domestic chores are the basic activities women undertake to process food for the households that prove their being principal food providers to household members. Women at household level carry out domestic activities that are directly or indirectly related to household food security. Among others, women spend much of their time on water fetching, fuel wood collection, and grinding mill.

Water fetching and fuel wood duties are daily routine that are often remote from homes. Fifty-two percent of the women in the sampled households spend 1-2 hours per trip to fetch water (Table 4.11). Similarly, 13% of the women spend 2-3 hours on water fetching per trip (Table 4.11).

Consequently, as for who in the household more often is responsible for this duty, the data shows that women bear this activity. Consequently, in the sampled households, 37% of adult females, 5% female child and 51% of mothers carry out this activity in the same way, 7% of adult males and 1% of male child perform the job.

Table 4.11. Percentage distribution of the sampled household by time spend on water fetching in one trip and persons most often fetching per trip?

Time spend on water fetching			Persons most often fetching		
How far away is your water source?	Frequency	Percent	Who most often fetches water?	Frequency	Percent
1-2 hours walk from home	62	51.7	Adult male	8	6.7
2-3 hours walk from home	15	12.5	Adult female	44	36.7
3-4 hours walk from home	1	.8	Male child	1	.8
Less than an hour	42	35.0	Female child	6	5.0
			Mother	61	50.8
Total	120	100.0	Total	120	100.0

Source: Own Survey Sep, 2007

Another time consuming and difficult job for women domestically is fuel wood collection. On average, fuel wood is collected 2-3 times a week. In this regard, 24.2% of the women in sampled households spend 1-2 hours on fuel wood collection. Similarly, 40.8% of the women in the households spend 2-3 hours to collect fuel wood per trip. Furthermore, 20.8% of the women spend 4 hours to collect fire wood while 14.2% of them also spend more than 4 hours per trip (Table 4.12).

Table 4.12. Percentage distribution of the sampled households by time spend of fire wood collection in one trip

Time spent on collection of fire wood	Frequency	Percent
1-2 hours walk from home	29	24.2
2-3 hours walk from home	49	40.8
4 hours walk from home	25	20.8
More than 4 hours	17	14.2
Total	120	100.0

Source: Own Survey, Sep 2007

Finally, going to the grinding mill is another important duty for the households' food provision in which women spend long time on it. The burden of this duty is more serious in Haro than in any other village. In Haro women spend 8 up to 12 hours on grinding mill. The average hours spent on this purpose is 4 hours in all villages. On the other hand, as to who does this job, 86% of the women or wives in the households surveyed carry out this responsibility, while 9% of adult females in these households also perform the job.

4.3. Agricultural Activities

The gender analysis of both crop and livestock production is a useful method of coming with gender- disaggregated data. This is very important to compare the relative contribution of men and women to the household economy in general and in this respect to the household food security in particular. Moreover, its significance in planning and policy implication makes the endeavor indispensable.

4.3.1. Cereal Production

Table 4.13a. Distribution of the sampled households by women participation in cereal (sorghum and maize) production activities.

Agricultural activities Cereal production	Women			Percent yes (Participation)
	Yes	No	Total	
Clearing land	12	107	119	10.1
Ploughing	4	115	119	3.4
Planting/sowing	5	114	119	4.2
Weeding	14	105	119	12
Protection	81	38	119	68
Harvesting	52	67	119	44
Transporting grain	35	83	119	29
Preparing threshing ground	27	92	119	23
Storage	102	17	119	74

Source: Own Survey, Sep 2007

When cereal production activities are disaggregated into gender the participation of the household members vary across the different activities. Women direct participation in the cereal production activities is significant in storage management, protection, harvesting and transportation of grain. Table 4.13a shows among other things that, 74% and 68% of the women participate in storage management and crop protection respectively. Women participation is low in ploughing and sowing. This is because of the majority of the communities' perception in general consider ploughing and sowing as men's task

Table 4.13b. Cereal production- distribution of sampled households by men participation in cereal (Sorghum and maize) production activities.

Agricultural activities Cereal production	Men			
	Yes	No	Total	Percent yes (Participation)
Clearing land	112	7	119	94
Ploughing	113	6	119	95
Planting/sowing	112	7	119	94
Weeding	108	11	119	91
Protection	44	75	119	37
Harvesting	101	18	119	85
Transporting grain	98	21	119	82
Preparing threshing ground	105	14	119	82
Storage	22	97	119	19

Source: Own Survey, Sep, 2007

On the other hand, men participation is more significant than women in cereal production activities. Men dominate most of the activities mainly in land clearing, ploughing and sowing. In contrary, men participation becomes less important in activities women intensively participate. In consequence, only 19% and 37% of the men in the sampled households participate in storage management and cereal protection respectively (Table 4.13b).

Girls' participation in cereal production activities particularly becomes significant in cereal protection. Fifty-two percent of the girls in the household surveyed participate in this activity. In harvesting, transportation of cereal and storage management girls' participation is high.

Moreover, boys also participate in the different cereal production activities. Boys participate significantly in cereal protection and harvesting than other activities. Respectively, 57% and 45% of the boys in the households surveyed participate in these two activities (See Annex, N₀-I).

4.3.2. Livestock Production

Table 14a. Livestock production- distribution of the sampled households by women participation

Livestock production	Women			
	Yes	No	Total	Percent yes (Participation)
Goats Herding	87	33	120	73
Sheep Herding	86	34	120	72
Cattle Herding	86	34	120	72
Camel Herding	20	100	120	17
Goats Milking	117	3	120	98
Sheep Milking	118	2	120	98
Cows Milking	119	1	120	99
Camel Milking	5	115	120	13

Source: Own Survey Sep, 2007

With regard to livestock production women dominate in most activities. Thus, more than 70% to 90% of the women in the households surveyed directly manage livestock in the households. Only, their participation is minimum in camel related activities (Table 4.14a).

Table 4.14b. Livestock production- Distribution of the sampled households by men participation

Livestock production	men			
	Yes	No	Total	Percent yes (Participation)
Goats Herding	5	115	120	4
Sheep Herding	5	115	120	4
Cattle Herding	10	110	120	8
Camel Herding	100	20	120	83
Goats Milking	-	120	120	-
Sheep Milking	-	120	120	-
Cows Milking	-	120	120	-
Camel Milking	105	15	120	88

Source: Own Survey, Sep 2007

In contrast, men participation in livestock production is relatively insignificant. They only participate intensively in camel management. In this regard, more than 88% of the men in the sampled households exclusively manage camel.

Furthermore, girls and boys are participant actively in livestock production activities. Girls' participation is more significant in goats and sheep herding. More than 60% of the girls in the sampled households participate in these activities. Similarly, boys actively participate in goats, sheep and cattle herding. More than 50% of the boys in sampled the households participate in these activities (See Annex No.I).

4.4. Marketing Activities

4.4.1 Crops Marketing

Marketing is another important dimension in household food security. Women also take active roles in marketing of both crop and animal productions. As Table 4.15a shows, women actively participate in crop marketing. More than 90% of the women in the sampled households carry out the different crop products marketing activities in this regard.

Table 4.15a. Distribution of the sampled households into crop products marketed by women

Marketing of crop products	Women			
	Yes	No	Total	Percent of Yes
Sorghum	116	4	120	97
Maize	117	3	120	98
Vegetables	117	3	120	98
Fruits	108	12	120	90
Chat	95	25	120	79

Source: Own Survey, Sep, 2007

On the other hand, men participation in the different crop marketing activities is comparatively lower. Table 4.15b below indicates that men's marketing roles are not so significant except for chat and fruit marketing. For that reason, in all the sampled households 77% and 36% of the men carry out chat and fruits marketing (on farm) respectively.

Table 4.15b. Distribution of the sampled households into crop products marketing activities by men

Marketing of crop products	Men			
	Yes	No	Total	Percent of Yes
Sorghum	11	109	120	9
Maize	11	109	120	9
Vegetables	12	108	120	10
Fruits	43	77	120	36
Chat	92	28	120	77

Source: Own Survey, Sep 2007

4.4.2 Livestock and its Products Marketing

With reference to livestock and its products, marketing women participation shows discrepancies among the various activities. Women participation is significant particularly in livestock products marketing. Consequently, 98% of the women in the sampled households carry out these activities. Similarly, they participate in meaningful degree in goats and sheep marketing. In this regard, 52% and 55% of the women in the households participate in goats and sheep marketing respectively. (Table 4.16a).

Table 4.16a. Distribution of the sampled households in livestock and its products marketing by women

Marketing of Livestock and its products	Women			
	Yes	No	Total	Percent of Yes
Cattle	10	110	120	8
Goats	62	58	120	52
Sheep	66	54	120	55
Camels	3	117	120	3
Milk	118	2	120	98
Butter	118	2	120	98
Ghee	118	2	120	98
Hides/skin	9	111	120	8
Chicken	114	6	120	95
Eggs	115	5	120	96

Source: Own Survey, Sep 2007

In contrast, men's participation is much less in livestock marketing in general. Men's participation is more intensive in big animals marketing such as cattle and camels. In this regard, 92% and 98% of the men in the households market cattle and camels respectively as Table 4.16b below indicates (Table 4.16b).

Table 4.16b. Distribution of the sampled households in animal and animal products marketing by men

Marketing of Livestock and its products	Men			
	Yes	No	Total	Percent of Yes
Cattle	110	10	120	92
Goats	97	23	120	81
Sheep	92	28	120	77
Camels	117	3	120	98
Milk	63	57	120	53
Butter	-	120	120	-
Ghee	-	120	120	-
Hides/skin	-	120	120	-
Chicken	-	120	120	-
Eggs	-	120	120	-

Source: Own Survey, Sep 2007

Therefore, that data above verify that women participate in the various cereal and livestock productions as well as marketing activities. They dominate in the livestock production and the different marketing activities.

4.5. Households Income Sources

The purchasing power of a household in terms of food is crucial in household's food security. Particularly, cash income generation by women is very important in a household food security. In this regard, the results of the survey verify that women activity participate more than men in generating income to the households. Women generate significant proportion of the households' income from various sources. These are mainly from livestock and livestock products, fruits, self employment and bush products like fuel wood.

4.5.1. Income from ruminants (goats and sheep) and Goats' Products (milk)

Table 4.17. Percentage distribution of the sampled households in amount of income generated by women from ruminants and ruminants products annually.

Amount in birr	Frequency	Percent	Cumulative percent
≤ 456	104	86.7	86.7
457-913	12	10.0	96.7
914-1370	2	1.7	98.3
1371-2742	1	.8	99.2
>2742	1	.8	100.0
Total	120	100.0	

Source: Own Survey, Sep 2007

Women generate an average of 471 birr and also the income they generate ranges from 320 to a maximum of 3650 birr in a year. As Table 4.17 above indicates 99% of the women in the sampled households generate less than or equal to 456 up to 2742 birr. On the other hand, men generate incomes from goats, sheep, cattle and camels. Men generate maximum of 3400 birr from these source 98% of the men in the households generate less than or equal to 425 up to 1704 birr cumulatively in a year as Table 4.18 below indicates. Briefly, from livestock and its products the average income generated by women is 177 while that of men are 338 birr.

Table 4.18. Percentage distribution of the sampled households in amount of income generated from livestock and livestock products by men annually, (only cattle and camel)

Amount in birr	Frequency	Percent	Cumulative percent
≤ 425	85	70.8	70.8
426-852	19	15.8	86.7
853-1278	10	8.3	95.0
1279-1704	4	3.3	98.3
1705-3407	2	1.7	100.0
Total	120	100.0	

Source: Own Survey. Sep 2007

4.5.2. Crop Sales

The sources of crop sales for both men and women as in livestock sales differ in quantities and types. Women in this regard generate income from fruit (bananas and mangoes) sales while men generate income also from on farm chat sales.

Women generate more income from fruits (banana and mungo) more income than men (Table 4.18). They generate maximum of 11000 birr annually from this source, 99% of the women in the households generate less than or equal to 1375 up to 6880 birr from fruits sales. From this source the mean amounts of income generated by women is 940 birr in a year.

Table 4.19. Percentage distribution of the sampled households by amount of income generated from fruits sales by women (only banana and mango)

Amount in birr	Frequency	Percent	Cumulative percent
≤ 1375	89	74.2	74.2
1376-2751	23	19.2	93.3
2752-4127	5	4.2	97.5
4128-6880	2	1.7	99.2
>6880	1	.8	100.0
Total	120	100.0	

Source: Own Survey, Sep 2007

In contrast, men generate from crop sales (chat) up to maximum of 9480 birr and the mean income from this source is 860 birr. As Table 4.20 below indicates 99% of the men in the households generate less than or equal to 1185 up to 7116 birr.

Table 4.20. Percentage distribution of the sampled households by amount of income generated from crop sales by men (only on farm chat sale)

Amount in birr	Frequency	Percent	Cumulative percent
< 1185	90	75	75
1186-4743	27	22.5	97.5
4744-7116	2	1.6	99.2
>7116	1	8	100

Source: Own Survey, Sep 2007

4.5.3. Casual Labor (Self- employment and employment)

In this category women and men income sources also differ. Women generate sufficient amount of income from self-employments. These are mainly from small business (such as kiosk), trading within and across villages. On the other hand, men only generate income from private farm employment such as agricultural labor (weeding and harvesting).

Women generate up to maximum of 4680 birr from self employment (Table 4.21) below indicates 99% of the women in the sampled households generate less than or equal to 585 up to 4102 birr from this source.

Table 4.21. Percentage distribution of the sampled households by amount of income generated from casual labor (self-employment) by women

Amount in birr	Frequency	Percent	Cumulative percent
< 585	82	68.3	68.3
586-2343	21	17.5	85.8
2344-4102	16	13.4	99.2
> 4102	1	.8	100
Total	120	100	

Source: Own Survey, Sep 2007

Then again, men generate maximum of 3600 birr from this source. As Table 4.22 below 98% of the men in the sampled households generate less than or equal to 450 up to 2912 birr from this source. Further the mean income generated by women from casual labor (self- employments) is 734 birr while that of men is 397 birr from private - farm employment in a year.

Table 4.22. Percentage distribution of the sampled households by amount of income generated from casual labor (private-farm employment) by men.

Amount in birr	Frequency	Percent	Cumulative percent
≤ 450	89	74.2	74.2
451-1803	21	17.5	91.7
1804-2912	7	5.8	97.5
>2912	3	2.5	100
Total	120	100	

Source: Own Survey, Sep 2007

4.5.4. Bush Products

Other sources of income for the households are the sales of fuel wood. Similarly, here too women contribute more income than men from the source. Table 4.23 indicates that women in the sampled households generate income than men with a maximum of 1095 birr in a year. The mean income generated by women from this source is 52 birr. Generally, 98% of the women in sampled households generate less than or equal to 137 up to 828 birr from fuel woods sales in a year. The income they generate ranges from 30 Birr to a maximum of 1095 birr.

Table 4.23. Percentage distribution of sampled households by amount of income generated from fuel wood by women

Amount in birr	Frequency	Percent	Cumulative percent
≤ 137	110	91.7	91.7
138-551	5	4.1	95.8
552-828	3	2.5	98.3
>828	2	1.7	100
Total	120	100	

Source: Own Survey, Sep 2007

On the other hand, the contribution of the men from this source to the total household income is insignificant. Table 4.24 below indicates only 1% of the men in the sampled households generate about 520 birr. The mean income generated by one man from this source is 4 birr.

Table 4.24. Percentage distribution of the sampled households by amount of income generated from fuel wood sale by men

Amount in birr	Frequency	Percent
0	119	99.2
520	1	.8
Total	120	100.0

Source: Own Survey, Sep 2007

In summary, when incomes to the total income of the households women contribute more income than men and hence more roles are played by them in household purchasing power of food and hence sustaining the food security situation.

As Table 4.25 below indicates 98% of the women in the sampled households contribute 1199 up to 6829 birr to the total income of the households. The total mean income individually generated by women is 4284 birr in a year. The maximum individual income generated by women is 10576 birr in a year.

Table 4.25. Percentage distribution of the sampled households by amount of total income generated by women.

Amount in birr	Frequency	Percent	Cumulative percent
1199-3040	78	65	65
3041-4934	35	29.2	94.2
4935-6829	5	4.2	98.3
>6829	2	1.7	100
Total	120	100	

Source: Own Survey, Sep 2007

Alternatively, men generate maximum of 9480 birr to the total household income. The total mean income generated by men is 1721 birr in year. Table 4.26 indicates, 99% of the men in the households contribute less than or equal to 1185 up to 8296 birr to the total households income.

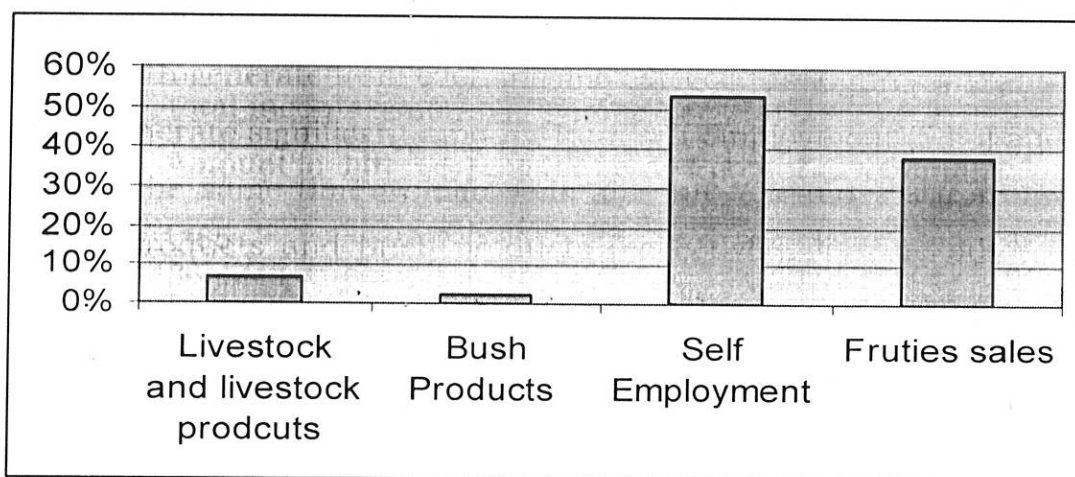
Table 4.26. Percentage distribution of the sample households by amount of total income generated by men per year

Amount in birr	Frequency	Percent	Cumulative percent
≤ 1185	55	45.8	45.8
1186-4740	61	50.9	96.7
4741-8296	3	2.5	99.2
>8296	1	.8	100
Total	120	100.0	

Source: Own Survey, Sep. 2007

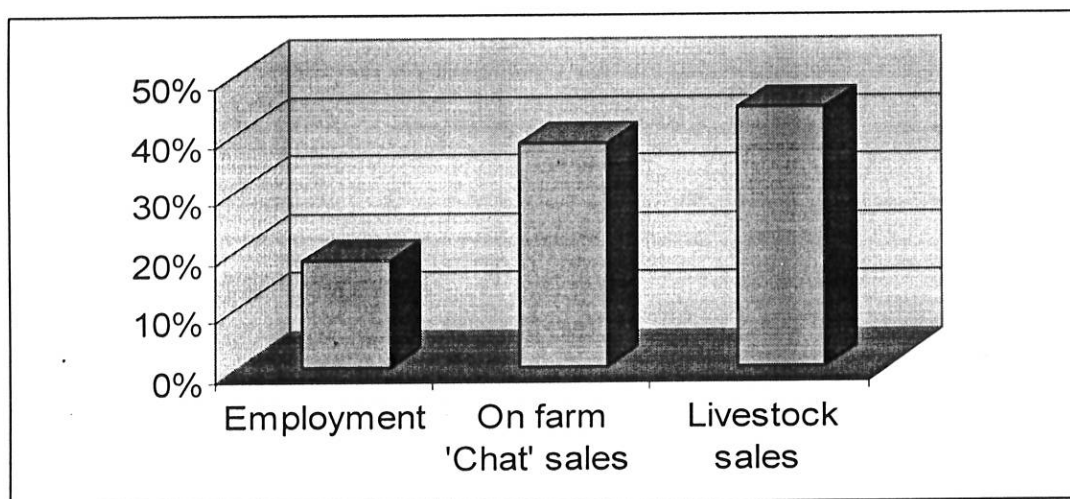
Consequently, there is a difference in the amount of income generated by women and men from the each source. This can be easily seen from the percent amount both generate from each income category as Figures 4.2 and 4.3 show. Women generate significant amount from self-employment (53%) and fruit sales (38%). At the same time women generate only 7% and 2% from livestock and livestock products and bush products respectively. On the other hand, men, generate more income from livestock sales (44%) and on farm chat (38%). Men only generate 18% from casual labor (employment).

Figure 4.2: Percentage distribution of the amount of income generated by women from each source.



Source: Own Survey, Sep 2007

Figure 4.3: Percentage distribution of the amount of income generated by men from each source:



Source: Own Survey, Sep 2007

It may be concluded, as to the total income of the sampled households as Table 4.27 below shows 55.8 of the households' income is between 3213 up to 5668 birr in a year. The total mean income of the sampled households is 4284 birr in a year.

Table 4.27 Percentage distribution of the total income of the sample households

Amount in birr	Frequency	Percent	Cumulative percent
756-3212	32	26.7	26.7
3213-5668	67	55.8	82.5
5669-9353	20	16.6	99.2
>9353	1	.8	100

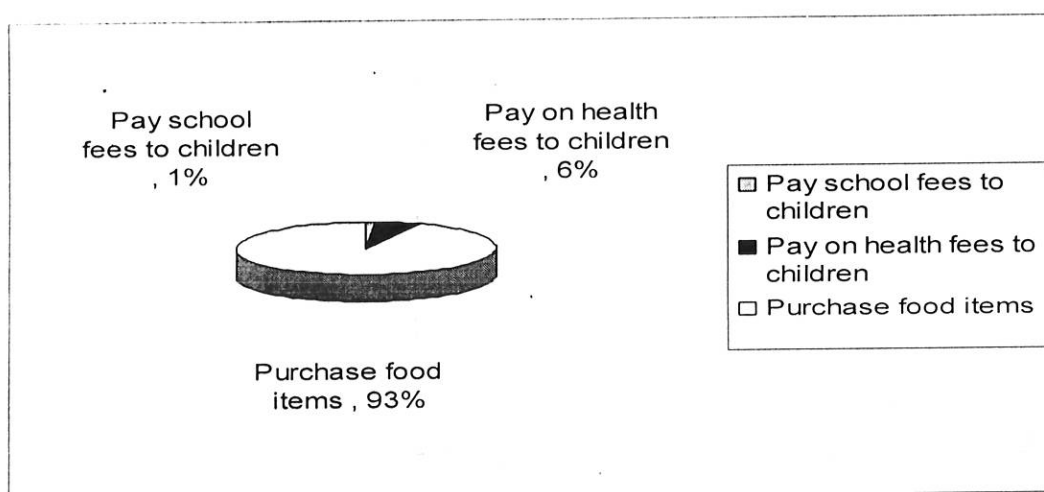
Source: Own Survey, Sep 2007

On top of that, the total income of the each sampled villages show discrepancies. The maximum income is generated in Sukule. Finally, to the total income of the households' women contributes 60% while men contribute 40%

4.6. Expenditure Patterns

The expenditure patterns of both women and men are decisive factor that affect the household food security. In this regard, the study confirms that women spend their income primarily on food items. As Figure 4.4 below indicates women in the households surveyed spend 93.3% of their individual's incomes on food item purchases. In the same way, they spend 5.8% of their incomes on children's health.

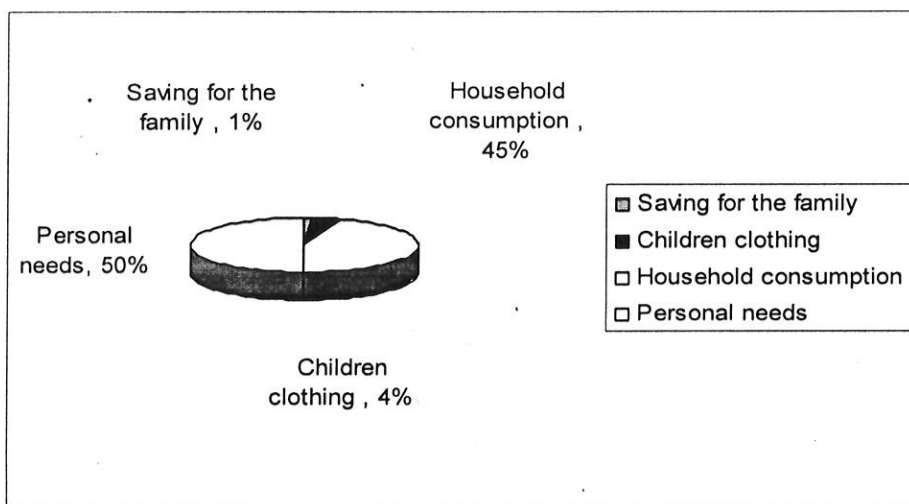
Figure 4.4: Percentage distribution of women expenditure patterns.



Source: Own Survey, Sep 2007

In contrast, men spending patterns are dissimilar from those of women. Figure 4.5 below shows that men spend 44.9% of their individual income on households' consumption. Moreover, men spend 50.5% of their incomes on personal needs. Men, only spend 3.7% of their incomes on children's clothing.

Figure 4.5: Percentage distribution of men expenditure patterns



Source: Own Survey, Sep2007

Consequently, men and women expenditures over the households' needs are different. Women in the sampled households spend their income on staple food (sorghum), non-staple foods (sugar, oil, salt, meat), children health, and households' items (soap and kerosene).

As Table 4.28 below indicates 60% of the women in these households spend 310- 1913 birr on these categories while 37.5% of the women spend 1914-4319 birr. Hence, 99.1% of the women in these households spend 310-5922 on these categories. The maximum expenditure of women is 6714 birr in the sampled households and the total mean expenditure of women is 1911 birr.

Table 4.28. Percentage distribution of the sampled households into amount of women expenditure

Amount in birr	Frequency	Percent	Cumulative percent
310-1913	72	60	60
1914-4319	45	37.5	97.5
4320-5922	2	1.6	99.1
>5922	1	.8	100
	120	100	

Source: Own Survey, Sep 2007

On the other hand, the detailed expenditure patterns of men income are on personal needs such as chat and cigarette, family clothing and restocking. The maximum expenditure of men over these items is 5302 birr and the total mean expenditure of men is 784 birr. Table 4.29 below shows 48% and 35% of the men in the sampled households spend 0-664 and 664-1327 birr respectively on these categories. Cumulatively, 99% of the men in the households spend 0-2655 birr on these categories.

Table 4.29. Percentage distribution of the sampled households into amount of men expenditure.

Amount in birr	Frequency	Percent	Cumulative percent
< 663	57	47.5	47.5
664-1327	42	35.0	82.5
1328-1991	17	14.2	96.7
1992-2656	3	2.5	99.2
>2656	1	.8	100.0
Total	120	100.0	

Source: Own Survey, Sep 2007

Eventually, the total mean expenditure of the sampled households is 2652 birr. Forty-five percent of the sampled household's total expenditure is between 2248-4689 birr. Besides, 98% of the sampled households expenditures range between 620-6318 birr as table 30 below indicates.

Table 4.30. Percentage distribution of the sampled households total expenditure

Amount in birr	Frequency	Percent	Cumulative percent
620-2247	49	41	41
2248-4689	54	45	86
4690-6318	15	12	98
>6318	2	2	100
Total	120	100	

Source: Own Survey, Sep 2007

4.7. Factors Affecting Women's Roles in Household Food Security

4.7.1. Access and Control over Productive Resources

Women access and control over productive resources is an essential factor that maximizes their roles in households food security. Access indicates the issue of availability, to make use of productive resources but, the term control implies the ability and the right to use or exchange or sale the productive resources and the right to reserve any income gained from the sale or exchange of the productive resources. In this respect, the results of the study verify that while women have high degree of access to households' productive resources their control over some of the critical resources are minimum. Consequently, as Table 4.31 below indicates over 99% of the women in the sampled households have access to households' productive resources.

Table 4.31. Distribution of the sampled households into women access over productive resources.

Women access to productive resources				
Resource	Yes	No	Total	Percent of yes
Land	118	1	119	99
Crop product	118	1	119	99
Chat	95	24	119	80
Oxen	111	11	120	93
Cow	119	1	120	99
Sheep	119	1	120	99
Goat	117	3	120	98
Camels	29	91	120	24
Poultry	120	-	120	100
Donkey	103	17	120	86
Milk	120	-	120	100
Butter	120	-	120	100
Skim milk	120	-	120	100
Ghee	120	-	120	100
Cash money	118	2	120	198

Source: Own Survey, Sep 2007

In contrast, women's control over these resources, which are very important in household food security, is insignificant except over livestock products. Table 4.32 below justifies women's control over the basic households resources are limited. These are mainly resources such as land, crop products, and chat and cash income. Only 11% of the women in the households surveyed have control over land, crop products and chat. Also, 18% of the women in sampled households have control over the household cash income.

Table 4.32. Distribution of the sampled households into women control over productive resources

Women control over productive resources				
Resource	Yes	No	Total	Percent of yes
Land	13	106	119	11
Crop product	13	106	119	11
Chat	13	106	119	11
Oxen	7	113	120	6
Cow	15	105	120	13
Sheep	17	103	120	14
Goat	43	77	120	36
Camels	7	113	120	6
Poultry	100	20	120	83
Donkey	36	84	120	30
Milk	111	9	120	93
Butter	116	4	120	97
Skim milk	115	5	120	96
Ghee	100	20	120	83
Cash money	22	98	120	18

Source: Own Survey, Sep 2007

On the reverse, the position of men in this respect is different. Men have both high degrees of access as well as control over the essential households' resources. Particularly, they dominate in items of control over land; land products and household cash incomes that are crucial in households food security. The results of the study as Table 4.33 indicates over 87% of the men in the sampled households exclusively control these resources.

Table 4.33. Distribution of the sampled households into men control over productive resources

Men control over productive Resources				
Resource	Yes	No	Total	Percent of yes
Land	106	13	119	89
Crop product	107	12	119	89
Chat	106	13	119	89
Oxen	111	9	120	93
Cow	104	16	120	87
Sheep	103	17	120	86
Goat	82	38	120	68
Camels	111	9	120	93
Poultry	20	100	120	17
Donkey	64	56	120	53
Milk	8	112	120	7
Butter	9	111	120	8
Skin milk	7	113	120	7
Ghee	11	109	120	9
Cash money	104	16	120	87

Sources: Own Survey, Sep 2007

4.7.2. Support from other Sources

Table 4.34. Distribution of the sampled households by type of support received from NGOs and the nature of activities under operation.

Types of support received			Types of activities under operation		
Types of support received	Frequency	Percent	Types of activities	Frequency	Percent
Improved seed	3	3	Road and bridge construction	1	.8
Food and edible oil	112	93	Food for work	5	4.2
Food for work	5	4	Health and education service	17	14.2
			Water project	20	16.7
			Food aid	77	64.2
Total	120	100.00	Total	120	100.0

Source: Own Survey, Sep 2007

The types of support gain from other sources such as from GOs and NGOs are basic in strengthening the capacity of women in their roles in household food security. Likewise, the relevant development programs implemented by these organizations are supportive in enhancing the local development in general and food security in particular. In this view, the data in Table 4.34 above proves that the forms of support received from these organizations are mainly food aid. In that order, 93% of the sampled households received food and edible oil and 4% received food for work. Only 3% of the households received improved seeds.

Again, food aid has been identified by the local people as the main activities pursued by the operating NGOs in their locality. Sixty-four percent of the sampled households in the four villages identified food aid as the first priority of these organizations. As the same time, 14% of the households also identified health and education service as the first priority of these organizations. And 17% of the sampled households responded water project as the primary program under implementation by these organizations in their locality.

4.7.3. Decision-Making in The Households

Table 4.35. Percentage distribution of the sampled households into individuals making decision over the household income and the cases women need husbands' permission

Who makes decision on household income			Cases women need husband permission		
Who in the household makes the major decision on the households' income?	Frequency	Percent	For what cases do you need the permission of your husband?	Frequency	Percent
Husband	104	87	Crops or livestock given out or sold	100	83.3
Wife	16	13	Do not need husband permission	16	13.3
			Decide together	4	3.3
Total	120	100.0	Total	120	100.0

Source: Own Survey, Sep 2007

The decision making power of women in the households is also a factor that influences their roles in household food security. Decision-making over household income is the most important dimension of this argument. In this respect the results of the study verify that 87% of the households' surveyed men solely make decision on the household income. Only 13% of the women in these households make decision over the household income (Table 4.35) .

Therefore, women in these households must require their husbands' permission on their daily roles in household food security. The data of the study imply that 83% of the women in the sampled households need the permission of their husbands in making decision over crops and livestock and its products. Only, 13% of the women in the households do not need the permission of their husbands in making decision over these resources. Further, 3% of the women in the households surveyed men and women make decision by consulting each other together on household income.

Conversely, women have power in making decision when it comes to the food provision of household members. In this context, 91% of the women in the sampled households make decision by themselves regarding grain consumption in the households. Only 9% of the households' surveyed men exclusively make decision over the household grain consumption (Table 4.36).

Table 4.36. Percentage distribution of the sampled households as who make decision on the household's grain consumption

Who in the household makes the major decision regarding grain in relation to household consumption?	Frequency	Percent
Husband	11	9.2
Wife	109	90.8
Total	120	100.0

Source: Own Survey, Sep. 2007

4.7.4. The Community Perception towards the Role of Women in Household Food Security

Table 4.37. Percentage distribution of the sampled households into the community perception and factors that shape their attitude towards the roles of women in household food security.

Community Perception			Factors shaping the community perception		
Community perception	Frequency	Percent	Factors shaping community attitude	Frequency	Percent
Women are degraded or their roles viewed negatively	58	48.3	Cultural or customary value	81	67.5
Women roles are viewed positively	62	51.5	Religious values	2	1.7
			No negative values	28	23.3
			Poor economic status.	1	.8
			Cultural and religious values	8	6.7
Total	120	100.0	Total	120	100.0

Source: Own Survey, March 2004

The public view and perception towards women determine their social status in general and their roles in household food security in particular. Consequently, the study also sought to find out the public perception about the roles of women in the household food security. As a result, 48% of the women in the sampled household responded that their roles are degraded or viewed negatively while 52% of the women responded that they are viewed positively as Table 4.38.

Consequently, the major factors shaping the negative perception of the local community towards women were researched. Thus, the data prove as table 38 above that 68% of the women in the sampled households responded that cultural or customary values shape the community perception. Besides, 7% of the women in the households responded both cultural and religious values are behind the negative perception towards them.

Moreover, 2% of the women responded religious values are the causing factors while 1% of them expressed over poor economic status of the women in the community as the reason that shape the community perception. Only 23% of the women in the households responded that there are negative perceptions against women roles in the Household (Particularly to those working outside homes)

4.8 Major Constraints Faced by Women in their Roles of Household Food Security

Women in their efforts to maximize their roles in household food security, they encounter different social, economic and institutional obstacles. The study also tried to investigate the major problems encountered by the women in the four villages. Various factors that impeded women roles and potentiality in household food security were found out.

Hence, as Table 4.39 below indicates 34% of the women in the sampled households encounter lack of money to trade as major obstacle. Secondary, 13% of the women in these households responded workload as major constraint. Similarly, 13% of the women explained the absence of facilities such as health and transport as major problems. In addition to this, 13% and 19% of the women in the households underlined lack of markets and water shortage as major constraints towards their roles in household food security respectively.

Table 4.38. Percentage distribution of the sampled households into major constraints faced in their roles of household food security

Major obstacle	Frequency	Percent
Lack of money for trading	41	34.2
Lack of facilities-health, and transport	16	13.3
Workload	15	12.5
Women are not demanded in hired labor	1	.8
Lack of education	3	2.5
Women's rights are not respected	1	.8
Lack of market	16	13.3
Malaria prevalence	4	3.3
Water shortage	24	18.5
Pressure from husband	1	.8
Total	120	100.0

Source: Own survey, March 2004

To wind up, women's roles are much more considerable in every aspect of the household food economy. They participate actively in the various household, production and marketing activities more than men in the household. Specially, women highly dominate in livestock production and crop products marketing. Similarly, women contribute more income than men to the total household income that is crucial for the households' purchasing power of food. Moreover, women commitments in spending their individually generated income on the household food needs and on children's health make them the basis for the household food security in the four villages in particular and the region in general.

However, women in the four villages while making all these efforts come across problems that limit their roles in the household. Primarily, they are less empowered that they lack control and decision-making power over the providence resources of the household and income. Secondly, women do not get institutional support such as assistance (such as training, technology transfer and credit) from the local development agencies. Moreover, women's roles in household food security are cur tailed by different constraints.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1. Summary and Conclusion

This study set out to assess the various roles of gender and their contributions towards the attainment of sustainably food secured communities at household level in Ulanula and Kile kebeles of the Harari region. Moreover the study depicts that why gender is an issue in food security, further the result of the survey reveals that even in the prevalence of gender disparity in the community, women are still central and very important figures for a household to have continuous accesses to adequate and nutrient food either through production or purchase sustainably. Study results in this regard indicate that the average household size is 6 members; and are characterized with the two female-headed households while 32% and 13% of the sampled households are defacto and dejure female-headed household respectively. With regard to gender composition, women account for 47% of the total sampled population. Besides, 56% of the sampled population is less than or equal to 15 years of age which implies a high dependence ratio. In terms of education, 68% of the school age groups are illiterate.

Economically, 85% of the sampled households depend on agricultural activities and 14% on both agricultural and non-agricultural activities. Regarding, cultivable and non-cultivable lands ownership 1% and 74% of the households are landless respectively. The average land holding size of cultivable land is 3.41 Koti while that of non-cultivable land is 2.32 Koti. Cows, oxen, sheep, goat and camel are the major types of livestock owned. Ninety-nine percent of the sampled households have 2-5 numbers of cattle. Similarly, 59% and 27% of these households have 0-4 and 5-9 numbers of goats and sheep respectively. On the other hand, sorghum, maize, chat and fruits are the major crops grown. One-to-sixteen quintals of cereals are produced in a year. Similarly, 17kg - 112kg of sorghum is purchased per month. Over and above, several crop

constraints in the area such as water shortage (62%) and diseases; pests (31%) are the major prevailing problems.

The major sources of food are from own produce, milk and milk products, meat, food purchases and relief food. Own production and food purchase are the two most important sources of food that cover 30% and 43% of the households' food requirements on average respectively. Relief foods are also considerable food sources that provide 19% of the sampled household food needs on average. The major source of water is rivers while that of energy are forest, market and own plantation-90% of the sampled households get their fuel woods from the forest.

Regarding the roles of women in household food security the data shows that women in the four villages take part in several activities and are the main producers in the household. Women play significant roles in household food security by engaging into various household foods processing activities to crop (cereal), animal, off-farm and non-farm employment activities. In the households, women are so much occupied by water fetching, fuel wood collection and grinding mill. They spend between 1 to 5 hours to fetch and are exclusively responsible to carry out this activity. For instance the data shows that 51% of the mothers, 5% of female child and 37% adult females of the sampled households always fetch water. Likewise, women spend a minimum of 1 and maximum of more than 5 hours to collect fuel wood. The study further shows that, 93% of the women in sampled households spend 1-10 hours for grinding mill.

Furthermore, women also participate in the various cereal and livestock production activities. Women dominate in livestock and ruminant production activities (mainly goats, sheep and cattle herding and milking) and men dominate cereal production activities.

Similarly, women outweigh in both livestock and its products marketing than men. Most of all, women also contribute more incomes than men to the total income of the households. Women generate 60% of the total household's income while men generate only 40%. Women also generate individual income

from fruits sales (38%) and self-employments (53%). On the other hand, men's main sources of income are mainly from on farm chat (38%) livestock sales (44%) and casual labor (18%).

The study also reveals that the expenditure patterns of women and men in the households justify women's importance in the household food security. Women in the sampled households spend 93% of their individual incomes on staple and non-staple food purchases and 6% of their income on children's health. In contrast men spend only 45% of their individual incomes on household consumption (sorghum purchase) and 51% on personal needs such as chat and cigar while the remaining 4% is spend on family clothing.

The study further identifies several factors that affect women's roles in household food security. Primarily women lack control over the households' productive resources. Even though 99% of the women in the sampled households have access to main productive resources (such as land, crop product and livestock), only 11-18% of them have control over the fundamental households' productive resources (such as land, crop products, chat and cash income). Women only have significant control over milk and milk products and over 93% of them control these resources. On the other hand the study shows that, over 89% of the men in the sampled households control the essential household productive resources.

Over and above, women lack support from other sources, which are vital in this regard such as access to training opportunities and technologies. Only 3% of the women in the sampled household had access to improved seeds. Further, there are no particular development organizations in the four villages that focus on women development. In this context, 64% of the women in the sampled households identified food aid as the only program in their locality under operation which involve development organizations.

Decision-making in the household is an equally important factors that determines women's potential roles in household food economy in general and

in food security in particular. Mainly, the ability of the women to make necessary decision over household income is a basic role in household food security. In this respect, only 13% of the women in the sampled households are in position to make decision over their household incomes generated either individually or in-group. In all sampled households 87% of the men utterly make decision over the households' income.

The study also reveals that women have to seek their husbands' permission regarding other duties in the households. Eighty three percent of the women in the households responded that they need husbands permission when they intend to sell or give out livestock or crop products while 13% do not. However, it is shown that women have decision making power with regard to grain consumption in the households. Ninety-one percent of the women in the sampled households make such decisions by themselves.

Community perceptions towards women influence their roles in the household. In this study, 48% of the women in the sampled households responded that their roles are disregarded while 52% of the women believe that they are viewed positively when they engage in off farm and non-farm employment and hence make more efforts for the households' economy. It is shown that community negative perceptions about women's roles are caused by socio economic factors. Survey results indicate that 68% of the women believe that cultural values shape the community perception. Another 7% of the women in the sampled households underlined that the negative perception of the community was caused by both cultural and religious values.

The study highlights that women in the woreda in general are constrained by many obstacles in their roles of household food security. The major ones include: lack of money to trade (34%), absence of facilities such as health and transport (13%), heavy work load (13%), lacks of market (13%), and water shortage (19%).