

# The Role of Backyard Farming for the Socio Economic Empowerment Of Women

A Case Study in Five Woredas' of East and West Gojjam Zones



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October, 2016

Addis Ababa

#### SCHOOL OF SOCIAL WORK

#### INDIRA GANDHI NATIONAL OPEN UNIVERSITY

#### **NEW DELHI**

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OF MASTERS OF SOCIAL WORK (MSW)

BY

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# **Declaration**

I hereby declare that the dissertation entitled <b>The Role</b>	of Backyard F	Farming for the	Socio Economic
Empowerment Of Women submitted by me for the	partial fulfillme	ent of the MSW	to Indra Gandhi
National			

National
Open University New Delhi is my own original work and has not been submitted earlier either to
IGNOU or to any other institution for the fulfillment of the requirement for any other programme
of the study. I also declare that no chapter of this manuscript in whole or in part is lifted and
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# Certificate

This is to certify that Mr.
student of MSW from Indra Gandhi National Open University, New Delhi was working
under my supervision and guidance for his/her project work for the course MSWP-001. His
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Of Women
Which he is submitting, is his genuine and original work
Place
Date
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# **Dedication**

To my father and mentor Abebe belachw who is hard worker; exceptionally smart and compassionate. He has never been tired of thinking and doing good things to fallow humankinds. You are my hero, moral standard. I have nothing other than what you gave me

To my son Fikir Letarik, who is the source of my happiness. Fikir your smile worth more than the most precious thing in the world to me. *Edegilign* 

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# acronomis,

ACSI Amhara Credit And Saving Institution

ATA Agriculture Transformation Agency

FGD Focused Group Discussion

FHH Female Headed Households

GO Government Organization

IVS Input Voucher System

MFI Microfinance Institution

MHH Male Headed Households

NGO Non Government Organization

PRA Participatory Rural Appraisal

### **Abstract**

A research on the role of backyard crop livestock production is conducted in five weredas of East and West Gojjam Zones of Amhara region, Ethiopia, to assess the contribution of backyard production to women's empowerment in the study region and haw women farmers perceive their contribution in the production system

A key premise of this article is that female farmers productive activity linked with their household responsibility and women have better control on crops cultivated at the backyard and cattle kept at home. The paper identifies and examines the roles of female and male farmers in the crop production and household responsibilities. Examines access and control and factors and trends that affect women's triple role through analysis of primary data collected with the help of questionnaires, participatory rural appraisal tools like focus group discussions, observations, informal interview, participatory mapping in combination with gender analysis and case studies of input voucher system. The results of the analysis indicated that women play significant role in backyard crop/livestock production. Unlike their role in crop farming, women's role in backyard farming gets recognition. They influence decision in selection of crops and livestock kept at home; provide the labor and in most cases use the harvest as they need. Backyard cultivation play important role in household food security it also serve as the only source of income to large majority of women in the study area. Its contribution transcend economic arena and enters to social and cultural sectors too. The practice increases women's decision making and influence in the family as well as in the community. However, the benefit of the sector to poor women is dependent on availability and quality of institutional support in the study area. Access to technologies; input and credit found to play important role on the scope backyard crop and livestock production benefits females. Land, water, lack of household labor are identified as constraint to women's production from backyard

Prevailing cultural attitude, which promote men dominance, and poor acknowledgement given to women's ability to household food production hamper women's productive effort. Lack of gender sensitive interventions may end up creating additional burden to. Therefore, efforts to empower women should consider the social and cultural role of women. To facilitate greater

understanding of women's participation in agriculture activities, It is important to include women idea, belief, and needs in development programs, in order to insure equal benefit of women. Due attention should be given to gendered relationship prevailed in the family and in the community



#### 1 INTRODUCTION

#### 1.1 Background of the study

There are cases when agricultural intensification has a negative impact on female access and control of resources. Despite this, where women have been limited to domestic activities and reproductive role, the Practice of backyard crop and livestock production has emerged where by women have extended their engagement in small scale farming with in proximity of their homes.

Women farmers are the main food producers in developing countries and yet they are among the most vulnerable groups (Karki, 2009), Studies have shown that women play major roles in key farming operations such as planting, weeding, and harvesting, to the extent that certain crops are designated as "female" crops in some areas. In Africa, women account 75% of household food production; thus means food security were depended primarily on it (Garrity, 2006). Despite this, women have been left out of the formal agriculture extension process and the formal structures for rural development. By preventing women equal access to agriculture extension advice, inputs and financial credit, household food insecurity has been exacerbated (Frank, 1999).

Backyard crop and livestock production is one of the viable alternative systems for improving the livelihood of rural households. More importantly, the sector is contributing enormously towards ensuring food security of poor households who otherwise have very limited opportunities due to academic preparation and lack of major means of production. Besides improving consumption and enhancing nutritive intake the sector serve as source of income for thousands of rural women. However little attention in particular has been paid to the women, who tend to be predominating in the sector,

#### 1.1.1 Women in backyard crop livestock production

Review of literatures on pertained issue show women primarily, and most often exclusively, responsible for tending to backyard gardens, cleaning animal barns, feeding, watering, milking, milk processing and looking after poultry and small ruminants. In Africa context, backyard gardening is predominantly Practiced by women. Women play pivotal roles in subsistence and market gardening, animal husbandry; food processing, waste recycling and (re)use. Study by (Gabiso, 2015) showed women contribute more than half of labor requirement of home garden. They also play active role in the choice of crop/livestock cultivated at backyard (FAO, 1999)

Experience show that home based agricultural (backyard farming) practice play multiple role for the family in general and women in particular. It accounts for significant amount of home consumption. Besides consuming backyard products at home, many women sell their products at the local market and use the money generated to fulfill some needs of the family, especially those of children. Moreover, it is the only means of income for thousands of poor and marginalized women. The Practice is specially play significant role for women headed households. Most women farmers are probably engaged in self-provisioning to a larger extent than men (Hovorka 1999). The sector is particularly significant for women with larger families to feed and/or support (Dennery 1996, Maxwell 1995).

Resent literatures also identified linkages between waste management and women's participation in back yard farming that facilitate both household food security and local environmental sustainability. (Tulu, 1999). Women are environmental resource managers who (re)use and recycle materials to enhance crop and livestock yields to feed their households and communities. For example women in Ethiopia use animal manure and

backload fuel wood to satisfy energy needs for cooking and food processing. Waste from household and cattle shade used to maintain the fertility of the homestead plot.

Besides improving nutritive intake and food consumption backyard cultivation provides income that can be invested either on children or to fill minor gaps at home. Which enhance social status as well as decision-making power of women in a family. *Luc J.A. Mougeot* states that there is no doubt that home based agricultural connects well with women's traditional childcare and general household management roles. It allows them to strengthen food provisioning and work close to the home. Most women farmers are probably engaged in self-provisioning to a larger extent than men (Hovorka 1999). The sector is particularly significant for women with larger families to feed and/or support (Dennery 1996, Maxwell 1995). There is evidence that backyard farming can give women greater control over household resources, budget, decision-making and benefits. Many re-invest their savings into their children's education, into small upstream (bulk purchase and retail trade of vegetables, manure, fuel wood) or downstream (food processing and street vending,), as well as into other small businesses (Dennery 1997, Chauca 1999, Moustier 1996).

#### 1.1.2 Existing constraints

In spite of all these contributions women's participation in and contribution to agriculture has been masked by reference to a so called "farmer". This supposedly gender neutral term suggests an undifferentiated dweller who engage in agriculture yet is undoubtedly based on a masculine norm (Hovorke, 2001). This has led to a series of structural barriers, augmented by local cultural perceptions that have largely precluded women's participation in the agricultural extension process. This coupled with **lack of property ownership** and decision making in a family makes the Practice less responsive to full fill the women's as well as the family's needs. But, when we go to individuals home, it is the women and girl children of the

family that shouldered the responsibility of taking care of vegetables and other crops planted in a backyard and cattle kept at home.

Most challenge women farmers faced come from differential treatment of man and women which manifested in the family, schools and even in the society. Gender gap is manifest in various facets of life. In agriculture, this include among others, access to and control of tangible and intangible resources, as well as division of labor at the household level and among farming activities. Wilbers (2003) observed that traditions of matrilineal inheritance limit women's access to acquire land to live and do subsistence farming.

Gender differences also exist between women heads-of-households and men heads-of-households. Female farmers in female headed households tend to limit their labor input in farm activities because of heavy commitment to reproductive roles such as nurturing and caring for children and attending to elderly members of the household (Kamara et al., 1993). It turns out that in many cases, women use small lands, like backyard, primarily for subsistence crops to feed their families while men cultivates cash crops and keep the income. Unless these structural and cultural barriers are actively addressed by agricultural development programs women's location within the agricultural production process will continue to be marginalized hampering efforts to obtain household food security at a regional and national level.(Frank E.,1999)

Like the concepts of class, race, and ethnicity, gender is an analytical tool for understanding social processes (Working Document, 1998). as a result It is important to see homestead farming presence, potentials, and associated risks in association with the existing power relation between men and women, sexual division of labor, access to and control over resources,

#### 1.2 Statement of the problem

In Ethiopia various governmental and nongovernmental organizations work among women farmers, with the aim of not only providing source of income but enhancing nutritive intake and consumption as well. However condition of women in the country deteriorates from time to time. Despite efforts made by government and other development actors including Nongovernmental Organizations operating to alleviate women's poverty in the country, women remain the poorest of the poor. They access less resources and opportunities than men do. Female-headed households (FHH) that constitute 26% of households are among the poorest in the country and they suffer from chronic food insecurity (SDPREP, 2000).

To facilitate greater understanding of women's participation in agriculture activities, several important issues must be considered. It is important to include women idea, belief, and needs in development programs, in order to insure equal benefit of women. While planning and designing agriculture interventions special consideration has to be made for poor and marginalized women who has limited opportunity. Innovative solutions will be required to ensure that women maintain a reasonable level of food and nutritional security. Projects should consider the costs, labor and time involved visa vies the contemporary situation of poor women. Technologies need to be responsive to labor, water and land requirement. Without considering the existing situation projects may end up being additional burden to the poor.

Backyard cultivation is Practiced for multifaceted objectives ranging from subsistent household consumption to commercial drives. It plays key roles in ensuring food security of the poor and destitute households and creates employment opportunities and means to support poor women with source of cash income. The benefits of home based cultivation and

cattle keeping transcend economic considerations and enter the social realms as it helps empower women with a better decision making power in the family through the income they earn.

However, interventions so far implemented by various stakeholders working in the area have not been gender sensitive and failed to recognize the unique production objectives, needs and constraints faced by women farmers. This problem is not limited to the interventions that have been put in place to benefit poor farmers but also prevalent in the research and studies conducted to analyze the impacts of agricultural interventions and supposed to generate an input for a well-informed decision making. Given these gaps in research and development pertaining to the topic, this study will be conducted to understand and identify women farmers' idea in relation to cotemporary social, economic and cultural contexts which the agriculture programs, policies and projects need to put into consideration in order to improve women's benefit from the sector.

#### 1.3 The research questions

- What are the significance of backyard crop and livestock production to the household food security and employment of women?
- What are the major challenges that influence women farmers? And how they deal with it
- What are the productive objective of women farmers from homestead farming?
- To what extent are the current agricultural policies, programs and interventions found to be responsive in gratifying poor and marginalized women's need?
- What is the contribution of programs, like credit to the empowerment of women?

## 1.4 Objective of the study

The main objective of this study is to identify and understand the role of backyard crop and livestock production for the socio-economic empowerment of women in East and West Gojjam Zones of Amhara Regional State

### 1.4.1 Specific objective includes

- Assess socio-economic significance of backyard crop and cattle production (fattening) to household food security in general and income and employment of women in particular
- Study major challenges in backyard farming and the coping mechanisms adopted by women
- Identify specific production objectives and Practices of women involved in backyard farming
- Assess and identify factors that affect full benefit of women from extension advice, input use and financial credit services.
- Forward informed recommendations regarding the modalities of support that should be put in place by external actors, including governmental bodies and NGOs towards success of women involved in backyard farming

#### 2 METHODOLOGY AND CONCEPTUAL FRAME WORK

#### 2.1 Introduction

This chapter consists of the research methodology, data source collection instruments, method of data collection, method of data analysis and research ethics

### 2.2 Method And Design Of The Study

In a pilot study at Burayo(a city found 30km away from the capital Addis Ababa) Individual and group interview were hold with female farmers involved in backyard chicken production. From the interview what is learned that, even if there are some issues that all farmers share in common, there are difference in productive objective, constraint faced and coping up mechanism between male and female farmers in their backyard chicken production. It also observed, female farmers prefer backyard cultivation than crop farming at a plot found away from home. However their success dependant on the institutional support they get. The interview also revealed the context and the approach are very important in gendered studies concerning role of agriculture in general and backyard production in particular to women According to (Selemon, 2004) a research methodology to be employed could be determined on the bases of what and how is the researcher is trying to find out in relation to his research problem. In this research, the researcher contends that mixture of both quantitative and the qualitative approach is the best option. This is because an analysis of the role of backyard farming for the socio economic empowerment of women demands a methodology that takes into account the voice of women and how they perceive their role from their own perspectives.

Qualitative method is primary methodology used in the study. This is because qualitative methods allow generating data rich in detail and rooted in context. As (Tamru, 2007) research method allows to see and to investigate the situation in depth and from the perspectives of the participants. The study was conducted in a natural setting within which the female farmers are living and describe the situation through understanding of the response of female and male farmers, development agents, local officials as well as community observation. The point of interest in here is not to measure the behavior so that to generalize for the universe. Rather it is to understand the phenomenon of interest from the perspectives of the respondents.

According to social constructivism epistemology, individuals create meaning through there interaction with each other and the environment they live in. thus meal and female farmers and other personals of government and non-government organizations live in the same locality have shared meaning they attached to the **socio cultural issues** that determined the gendered situation of **access and control prevailing** in the area. The study is trying to understand this shared meaning among the community. According to Merriam (1998) qualitative study are interested in understanding the meaning people have constructed that is how they make sense of their world and experiences they have in the world.

The study condensed with case study approach. Case study provides a systematic way of looking at events, collecting data, analyzing information and reporting the result. (Merriam, 1998) revealed that a case study design is employed to gain in depth understanding of the situation and meaning for those involved, she emphasizes that the interest is in context rather than a specific variable.

The thrust of the case study is on in depth research. The researcher may, therefore, have to rely on a range of data collection techniques. In line with this the researcher used a combination of various qualitative and quantitative methods comprising survey and rang of Participatory Rural Appraisal (PRA) methods used in all the study sites.

### 2.2.1. Sampling technique

Data was collected from five woredas (distracts) found in East and West Gojjam Zones of Amhara Regional Sates namely Debre Elias, Gozamen, Baso Liben, Mecha and South Achefer were included in the study. The five woredas are the first in the country where the new input voucher system piloted project was implemented.

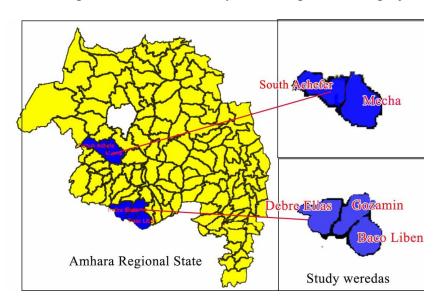


Figure 2-1 Map of study area

Data sources are female and male farmers found in five woredas of Amhara regional state.

The researcher used different sampling techniques for qualitative and quantitative tools.

Purposive sampling was employed to select respondents and target stakeholders for the Participatory Rural Appraisal methods used (like focused Group discussion (FGD), key informant interview, net mapping and observation). Care is given to include respondents from

different socioeconomic class. Sampled kebeles selected purposively based on previous knowledge regarding production system; inputs use in the kebele; use of irrigation and other technologies on backyard plot and opportunity to conduct group and individual interview Development agents briefed about the objective of the study and they help in selection of respondents

Table 2-1 study area

zones	woreda Sampled	Kebele Sampled	
West gojjam	South Achfer	Bachemo, Anguti	
	Mecha	Limchim, Addisna gulit	
East gojjam	Baso Liben		
	Guzamen		
	Debre Eliase		

While a great deal of this analysis was focused on qualitative methods a critical component related to socio economic characteristics were relatively detailed household questionnaire.

For the quantitative tools, multi-stage sampling procedure was followed to select the total sample of kebeles and then the households based on headship and participation on input use and adaption. The number of kebeles chosen from each woreda was based on the proportion to population sample size (PPS) approach. Using kebele registration lists, households were stratified according to male and female headed status as well as use of the credit voucher program. Out of intervention area households were just divided evenly between male and female-headed households. All male-headed households were chosen if they had a female spouse and separate questionnaires were administered to both male and female spouses. The

woreda/kebele sampling frame can be found in Table 1 and the household selection, of an intervention kebele, can be found with Figure

Table 2-2 List of woredas and sampled kebele for sunray

Zone	Woreda	Number of HH projected in 2014	Number of kebeles	kebeles sampled	Household sampled
East Gojjam	Debre Elias	21,403	15	2	39
East Gojjam	Gozamin	34,299	25	3	60
East Gojjam	Baso Liben	36,066	22	3	57
West Gojjam	Mecha	74,530	39	5	99
West Gojjam	South Achefer	33,829	18	3	60
North Shewa	Moretna Juru	24,136	15	2	40
North Shewa	Mojana Wodera	18,189	13	2	39

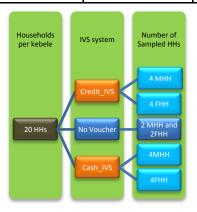


Figure 2-1 Stages of Household Selection from pilot woreda

#### 2.2.2. Tools and method of data collection

Data were collected according to three different contexts considered as pillars for current situation of women in the region. These includes

 Access and control. That look at who has access to and control of resources and services and decision making- finance in backyard farming context

- Factors and trends. What are Social and cultural issues that shape and/or contribute to current gendered situation –
- Gender considerations that are needed for institutions and project like access to credit,
   input

### I. Participatory Rural Appraisal (PRA) tools

A range of Participatory Rural Appraisal (PRA) tools were applied to study the social and cultural contexts of backyard crop and livestock production. Or to find out factors and trends that affect the gendered situation of access and control. PRA tools used includes Focused Group Discussion (FGD), key informant interview, net mapping and observation

a. Focus Group Discussions (FGDs) group discussion was hold approximately 8-12 persons guided by a facilitator, during which group members talk freely and spontaneously about certain guided topics. The purpose of FGDs is to obtain in-depth information on concepts, perceptions, and ideas of a group. FGDs can be useful to elicit perspectives of particular groups (e.g. women or men, young or old, wealthy or poor, different ethnic groups (Aberman et al. 2015).: it also used to study in greater depth the problem to be investigated and its possible causes and to explore controversial topics. All FGDs were gender disaggregated and the discussions were focused on the role of backyard farming for socio economic empowerment of women. All FGD were videotaped to record exactly what was said by the respondents and later transcribed. In each sample kebeles a separate FGD was hold with men and women farmers. FGD with female participants, separate FGD conducted with married female; female headed households and mixed group of both. Attempt has been made to maintain the setting as natural as possible.

The discussion started with an open ended question such as what do you grow at your backyard? The rest are conversational in an attempt to probe discussion in the team. After the first two discussions the researcher observed there are other questions that needed to be added. Eventually a set of questions are emerged from the evolving data and these questions used for the rest of FGDs. Totally 16 FGD were conducted each lasting between 1;20 to 1:50 hours.

- b. **Need assessment survey** separate questioners were evolved from FGDs and key informant interviews through scrutiny of the data gathered from the first two sessions. Socio cultural issues of concern were identified and prepared as a separate questioner to be rated by selected women farmers. About 45 different issues are identified and 101 respondents asked to rate. Need assessment is conducted with the objective of finding out factors that motivate or hinder women's role in the production. Respondents' rated each factor twice from 1 to 4. First they asked how important the issues is and second they asked haw satisfied they are with the service. If the issue rated important and satisfied we take it as potential/opportunity in the village. Where as if an issue rated important and not satisfied, the issue is chalange that development actors should consider. The response/rating is summarized as resources that are available in the locality to women and issues that are found as concern by the women respondents.
- c. **Net-Map is a participatory** interview tool that was developed to understand complex government structures (Bryan,2015). It uses social network analysis, stakeholder mapping, and power mapping to find out different factors that influence input use and adaption. It involves identifying different actors, pinpointing the links between different actors (advice, funding, etc.), and then imagining how much influence each actor has on a specific outcome. This allows for visualization of both formal and informal interactions that occur. The net map

interview aims at identify the stakeholders who work in the area of input use and adaption and to understand how the stake holders linked up with each other as well as how they work with rural smallholders

One thing about Net-Map is that it the focus is at how things are actually done on the ground and not only what is written in formal documents

First the potential actors are identified during the analyses of FGD with farmers; and key informant interview. Then group of informants, which include local farmers, credit and saving committee and Development agents asked to choose from the list of actors if they are involved in the network and how influential is each actor

Actors do not have to be highly influential, but they do have to be "involved" in input use and adaption.

- d. **key informant interview-** hold with development agents, ACSI personals, local leaders and other officials working in the locality and are believed to have good knowledge on local affairs.
- e. **Observation** is another tool used. The researcher observed how female farmers behave during the FGD and at their field plot. Information gathered regarding how they behave in their farm plot.

Nevertheless employment of these tools was not necessarily mutually exclusive in that the results of an activity were in most cases used as basis and start to proceed with another.

#### II. Questionnaire

Formal survey was carried for households to collect quantitative data. For the survey a questioner was developed and administered in the study area. A questioner is a research

instrument consisting of a series of questions and other prompts for gathering information from respondents. It is a formal, written, set of closed ended and open-ended questions that are asked of every respondent. The questions may be self administered or interviewer administered. A pretested structured questionnaire was prepared to collect data on;

- Household farmers characteristics, age, education, family size, household labor, land holding size and income
- Household Power and influence, decision making, division of labor, access and control to household resources.

To collect data six enumerators were recruited for ten days, all are development agent's in agronomy and animal science. They were trained on as how to handle and administer the questionnaire. Pilot test of the questionnaire was carried out on six households and then necessary modifications were made on the questionnaire. There was a close supervision by the investigator while the survey was being conducted. Questionnaire prepared for farmers and experts was translated in Amharic for better understanding. The questionnaire was divided in to four sections (appendix 2 and 3). The first section address questions relating to the household demographic and socio-economic characteristics, the second address questions about uses of backyard crop and livestock production, the third looked at the household awareness credit access from micro finance institutions and the last section of the questioner asked about the implementation of input voucher system as a substitute traditional system. In all sections of the questionnaire there is closed-ended question that the household select from the choice and open-ended question aimed at allowing the respondents to voice their opinions, questions and concerns

Questioner For the survey, five woredas and 400 households were targeted to be interviewed. Because of the inability of interviewing some of the chosen households, the final number of households was reduced to 394.

Separate Focused group discussions were held with female from MHH, FHH, male groups as well as young and older farmers. Individual interviews were held with selected participants of the focus group discussions to explore issues of interest in greater detail. Key informant interviews were held with local agricultural extension workers known as Development Agents (DAs), kebele administrators, and personnel in the respective woreda agricultural development offices; youth and women's affairs as well as ACSI bureaus. Moreover participatory net mapping conducted regarding stakeholders involved on input use and adaption and the extent each actor influence women's access to input credit. Finally Informed consent has been secured from all informants and all names included in the text are pseudonyms.

Other data sources are observation. Women observed during discussion, in a household and at their back plot. Observation also holds the crop composition and structure of back plots.

The quantitative assessment was primarily consisting of a household survey questionnaire administrated to men and women respondents. Moreover secondary data also used to shape the survey design as well as augment the primary data collected via a household questionnaire

#### III. Secondary data

Secondary data also used to shape the research design as well as augment the primary data collected via a household questionnaire and range of PRA tools used.

#### 2.2.3. Method of data analysis

In qualitative research the researcher is a primary tool for data collection and analysis, the researcher try to understand participants perspective and interpretation. For the qualitative the method used for interpretation is direct interpretation of the participants words in their interview called narrative analysis.

The analysis is based on the understanding of the shared meaning among the members of the community, particularly the female farmers on their achievement from backyard crop and livestock production and on the factors affecting their achievements.

Analysis of collected data is ongoing analysis of FGD and key informant interviews are coded during data collection as soon as transcriptions are available. Merriam (1998) stresses that in qualitative research data collection and analysis are simultaneous activities. I began interpreting the data on the first day of collection. As I analyzed the data new questions come then I look for clarification on the next field visits. The most basic presentation in a study's finding is a descriptive account that requires thinking through what will be included and what will be left out and compressing and linking data in a narrative that conveys the meaning the researcher has derived from studying the phenomenon. matrix are constructed from the data and are used to identify patterns, comparisons, trends and paradoxes.

Each case is reread with the objective of writing individual short summaries. These summaries allow to see threads that run through and thereby maintain the context for the quotes which are lifted out of the FGD and used as examples in writing up the research. Thus for further in depth understanding the data from each source categorized with female participants and with male participants- in two different lists. Finally the two lists with the similar categories merged and put in one. Subsequent items were sorted in these categories

exhaustively. These categories named by the term or concepts that reflect what is seen in the data. The categories founded are answers to the research question; they reflect the purpose of the study.

After collecting the qualitative data from the study sites, the data gathered from the field edited and checked to ensure consistency, legibility and comprehensiveness.

Quantitative data was analyzed using The SPSS statistical computer software (SPSS for window, release 15.0, 2006). Frequency procedures, ranking and sorting will be employed to analyze the quantitative data. Simple compilation, organization, triangulation procedures also employed.

**Triangulation:** Though data interpretation is subjective, validity is an issue that usually questioned about qualitative research. Validity is achieved through triangulation of data from multiple sources. four stage analysis was conducted

- Access and control profile considers resources such as: land, equipment, labor, capital, credit, education, and training. It differentiates between access to a resource and control over decisions regarding its allocation and use.
- 2. Analysis of factors and trends looked at underlying causes such as socio-cultural issues that determine the gendered situation of access and control in the region.
- 3. Participatory mapping. It is social net mapping which uses social network analysis, stakeholder mapping, and power mapping to find out different factors that influence input use and adaption. It involves identifying different actors, pinpointing the links between different actors (advice, funding, etc.), and then imagining how much influence each actor has on a specific outcome.

## 2.3. The case of Input voucher System (IVS) piloted project

Input Voucher system (IVS) is a systemic intervention undertaken by ATA's( Agricultural Transformation Agency) Systems Program which began the pilot phase in the 2014-2015 *Meher* crop season. The IVS is an alternative agricultural input marketing system to the current input distribution by multipurpose agricultural cooperatives. In the current system, grass-root cooperatives function as both financial institutions (i.e. provide input credit) and agricultural input retailer. The piloted IVS program followed a fairly typical design, implementation, and impact assessment methodology. What is not evident is the extent to which gender mainstreaming was included in all aspects of the intervention.

The new input voucher system separates financial and retailing services through interposing a financial institution with the aim of addressing the aforementioned weaknesses of the current system (e.g. timely loan repayment)—i.e. under the IVS, while agricultural cooperatives continue to be the main last mile input retailers, input credit, saving and insurance services are provided by financial institutions (e.g. MFIs in Amhara Region—ACSI). In other words, under the new system, farm households who want to purchase agricultural inputs on credit should apply for a loan at financial institutions and they will receive a voucher upon approval of the loan. The voucher can then be redeemed for the specified goods (e.g. fertilizer, seeds) at a primary cooperative, as opposed to taking the input on credit from the cooperative. For farmers who want to purchase inputs with cash the financial institutions act as a cashier. Therefore in the piloted input Voucher system MFI play key role

ACSI primarily provides loans to men and women using the popular group lending methodology. Currently it started Asset Loans which are given to individuals. But the evaluation of the creditworthiness and repayment capacities of applicants evolves the generic public through credit and saving committee and public forum. The community members involve in ACSI's work in different ways. They involve as clients (both credit and savings), as members of credit committees, as enforcers of repayments and as moral supporters.

Credit and savings committees is composed of two Kebele Committee members; three representatives from various community associations and one ACSI employee, evaluate the creditworthiness of applicants. Loans approval is often done in a public forum (usually in the premises of Kebele office) in the presence of the applicants and any member of the community can disapprove the loans based on the information they have about the applicant. ACSI is a community institution

This study was limited to gendered components of IVS and to find out factors and conditions that promote or discrged women's access to input. to have holistic view the study refrained from any prior assumption.

## 3 CONCEPTS AND SYSTEM OF BACKYARD

#### 3.1 Introduction

The chapter deals with definition of backyard crop livestock production; crops and livestock composition; determinants of the choice of crops; home garden structure and production system prevailed in the study area. It also included a topic which introduce us with the most common backyard types in the area

# 3.2 What is backyard crop and livestock production?

Backyard crop and livestock production (which is named as home base agriculture, homestead farming... in different literatures) is long lasting tradition that transfers from generation to generation through practice. The most common local name for the term is "garo limat". while at the same time indicating the closeness of the cultivation plot to the house. Backyard crop and livestock production is defined as the practice of food production in and around a house one dwell.

It involves two or more species of plants and /or animals with two or more outputs. The main components of the system are crops cultivated at backyard and cattle kept at home in combination with the living house, animals shade, grain stores, drying places, and plots of garden species together with the environmental factors of climate, soil, and landform. Under this definition, a variety of combinations of plants may be possible. But there are two important features that identify backyard agriculture from other land-use systems:

The cultivation must be on a land found adjacent/ immediate to the house one dowel, usually
at the back and sides of the house. Sometimes it may includes area of land found at the front
of the house too

 Two or more crops and livestock on the same land and there is significant interaction between these crops and livestock and both

In many well developed backyard plots portion of the plot is reserved for **seedlings**. The plot is usually fenced by tree species. In between other crops and cattle shade. The home garden area in the region has variable shapes and sizes. In most cases home garden size ranges from about 500m<sup>2</sup> to more than 2,500m<sup>2</sup> (a quarter of a hectare), but in extreme cases, gardens as small as 50m<sup>2</sup> and as large as 2 hectares have been observed

## 3.3 Who work on garden?

As (Tulu, 1999) gardeners around the world are very often men and women, usually women who used to rely on the land for food, or who need supplements to their food supply or income. They tend to be a vulnerable population, and the gardens and farms act as a means of increasing security. In Ethiopia, backyard gardening is a traditional practice. It includes keeping cattle, sheep, and chickens, or growing rain-fed crops such as maize and vegetables, on the plots adjacent to their houses.

# 3.4 Determinants of the choice of crops and livestock cultivated

Teklehaymanot, (2007) prevailed through years of experimentation, local people in different areas developed a general home garden structure with considerable diversity and flexibility that facilitates production of the major livelihood necessities. It is a sustainable multiple-production system whose outputs can be adjusted to local needs. It plays big role in the sustenance of rural community. Its contribution transcends the economic sector and inters to the social and cultural relic too. The locality have managed to select crops

that are co-adapted and that give aggregated benefits. Each home plot is unique in spatial and temporal arraignment, crop mix, and overall design (teklehaymano, 2007).

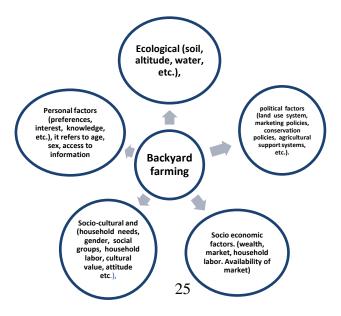
Generally, backyard farming is known for its complex and diversifies production system. Different crop/livestock species are integrated and are supported on each other. The choice of crops/ livestock is also influenced by the integrated benefit of the farming system. The rationale of cultivation lies in optimizing production based on the interactions between the components and their physical environment. The plots are widely diverse with cultural and geographic variability preventing from generalizing or extrapolating from one situation and applying the same framework to other areas. As regards the main determinants of the biotic change and variation, this paper adapted Nair (1989; 1993) criteria for agro forestry and modified for backyard production, as fallow.

- 1. Ecological (soil, altitude, water, etc.), Refers to the environmental and ecological suitability of area to a particular crop or livestock. There can be separate sets of crop livestock mix for arid and semi-arid lands or humid and sub-humid tropics. It reflects the intensity and scale of management prevailed. For example availability of water for dry seasons is the main determinants that affect the amount and diversity of production in the study area . .
- 2. Personal (preferences, interest, knowledge, etc.), it refers to age, sex, access to information (it that from neighbors, formal training at FTC),
- 3. Socio-cultural (household needs, gender, social groups, household labor, cultural value, attitude etc.), the type of crop cultivated and cattle found in backyard in a particular village is reflection of social and cultural value of that society. There is difference in choice and intensity of production on account of household head (female headed, male headed households), age and sex of owner. Most specifically social group and gender play big role in the production. People in the same village usually involved on the same production and have

similar pattern of backyard plot. Gender also play important role in the choice of crop cultivated. At study area there is tendency of naming some crops/livestock as female's and others as male's

- 4. Socio economic factors (wealth, market, **household labor**). Availability of market and its distance may encourage or discourage farmers to a particular production. It is possible to predict the wealth status of individuals by observing their backyard production. From filed visit it was observed, poor farmers usually limited to cultivation of crops for home consumption and cattle fodder. Whereas wealthy ones prefer fattening and plantation of trees for market and as indicator of wealth status
- 5. Political factors (land use system, marketing policies, conservation policies, agricultural support systems, etc.). The land use system and the size of land one holds is the main one heir. Moreover agricultural extension system, access to credit shaped the cultivation. Government policy like when the villagers forced to send all kids to school and ban laid on communal grazing land encourages farmers to cultivate fodder crops at their backyard.

Figure 3-1 determinants of backyard farming



# 3.5 Home garden structure

The term structure refers to the composition and arrangement of the components, both spatial and temporal. (mekuanint, 2010). The crops in home gardens appear to be arranged in a kind of chaotic random pattern. Yet backyard farming is known for its complex and diversifies production system in the region. Different crop/livestock species are integrated and are supported on each other. Crops are arranged in a way that facilitate different crops arranged in an integrated approach to solving land-use problems by allowing farmers to produce food, fodder, and fuel simultaneously from the same unit of land.

For example those involved in fattening usually cultivate fodder crops at their backyard. Cattle's are also kept not only for their meat and milk but also for their dung which used as organic fertilizer to backyard plot, to maintain the floor and furniture of a house and as main source of full for village community. Perennial crops provide life fence to the farm and shade to plants like coffee in addition to their direct benefit.

Backyard plot usually divided into different portions for, compost hole, water hole, seedling, to reserve, cultivation for home consumption....

# 3.6 Composition

Main components of backyard crops in the region are, the woody perennials live fence crops, vegetables and fruits, spices and herbs, vegetables and fruits, pasture species, and the animals. All backyard includes crops. The various crops grown and integrated livestock in the study area can be grouped into the following groups.

Widely Practiced in backyard cultivation are

1. Food crops. This includes crops like sorghum, corn, dagusa....

- 2. Vegetables and fruits. It includes leafy vegetables, non woody fruits and root and tuber crops..
- 3. Live fence crops. This includes woody perennial trees, fruits, fodder trees and other trees
- 4. spices and herbs this includes stimulants and cash crops. crops like chat, gesho, coffee and others also grouped under this and are known for their high market value.
- 5. Fodder crops. This are improved and indigenous pasture crops varieties that are primary grown as source of feed to cattle kept at home.

Besides crops cultivated the farming system integrate livestock. The most common one includes cattle, small ruminants, drought animals, chicken and bee keeping

# 3.7 Indigenous production system

Backyard cultivation utilizes indigenous production system that transfers through practice or words of mouth. It is labor intensive, complex and diversifies. Which utilize small hand tools for cultivation of land. The production system is characterized for its low investment on input, lesser risk of crop lose, low production and generates low income at whole sell. It provide an opportunity to experiment new introduced crop/livestock species; to grow crop/livestock of their choice;

In most of the study areas the fertility of the home yards is better than that of crop lands away from home. Hence, crops with better yield and market value are given priority to grow around the homeland. animal shad and house Waists are hold are the mains source used to maintain fertility of the land. It's the women and girl children of the family that usually work on it on day to day base. Moreover backyard plot provides an opportunity to women experiment crop/cattle of their choice which is almost impossible on farm land which managed and controlled by men.

There is little or no improvement on the production system the only improvement in the Practice is on use of improved seeds of vegetables, fruits, exotic breeds of chicken, sheep and cow. In some woreda's AI is implemented with limited access to female farmers. Irrigation is used in Anguti and Addisna Gulit kebeles. That helps the farmers to transfer to market oriented production. Hand pulled water wheel and back load is used in most kebele's for dry season cultivation.

The main constraints for the production are shortage of **land**, **household labor**, **water** for dry season cultivation, absence of technologies used in small lands, lick back plot, lack of credit back plot, poor extension service, market....

Table 3-1 comparison of backyard and crop farming

Backyard crop production	Crop Farming			
Usually used of hand tools for preparing the land	Ox plowing			
Found adjacent to the house one dowel	Found high use of input			
Keeping small number of livestock and cultivation of small land. So limited production	Cultivation relatively big plot			
Diversification of crops/livestock	One or two crops cultivated on the same land			
Minimal or no investment for input	Usually costly for fertilizer and seed			
Home consumption only extra sold	Both home consumption and market			
Main source of labor is from women	Both men and women			
Production and execution of products involves women in decision making	Men decide the production, use and execution of output			
Use organic fertilizer	High use of dap and urea.			
Relatively fertile land	Infertile			
Can be harvested 2 to 3 times a year	Usually ones a year			
High productivity but law production due to limited land and diversification	Relativity high production due to land size cultivated			

# 3.8 Some common examples of backyard in the region

The topic introduce us with some examples of backyard production in well developed ackyards observed in the study area. The practices included here are just a few among the countless and diverse backyard cultivation practiced in the study area, that is East and West Gojjam zones



Mainly fattening and dairy practiced. Back plot is used to cultivation of pasture crops Fodder trees also cultivated around fence. Some crops like coffee; fruits also found scattered on the back plot. Income from milk and fatten cattle are managed by men.

**Figure 3-2 cultivation of pasture for household fattening** Women in the area generate income from sell of pasture crops; their seed, *kubet* and others



Figure 3-3 irrigated cultivation of vegetables

Cultivation of vegetables on irrigated land the villagers managed to harvest two to three times in a year. The back plot is surrounded by

fodder trees that are used as shade and feed to cattle.



Food crops like sorghum and vegetable cultivated or rotation. The land is surrounded by perennial crops like banana, coffee and fodder trees

Figure 3-4



Figure 3-5 planted

On the same plot crops like green pepper;garlic; hop grown on the portion of the plot like back. On portion sorghum mixed with fruits like papaya. Trees like baherzaf



Cultivation of sorghum and trees on the same back plot. It is



common when water is shortage for dry season cultivation

**Figure 3-7**Tree plantation on degraded land.

## 4 SOCIO ECONOMIC CHARACTERISTIC

#### 4.1 Introduction

This chapter introduces us with socio economic characteristic of respondents. The unit deals with access and control profile of respondents, which consider resources such as: land, equipment, labor, capital, education. Attempt has been made to differentiate between access to a resource and control over decisions regarding its allocation and use.

# 4.2 Demographic data

Table 4-1 Basic demographic sex disaggregated by head and female spuse

							Education			
нн	Number of HHs	Age	HH Members	Adult HH Member > 15	Worker Equivalent <sup>1</sup>	Primary Marital Status	Main Activity— Crops (%)	None (%)	Elemen-tary or Adult	Jr. High or above.
Male	198	45.6	5.1	2.9	1.9	98.5% <sup>2</sup>	92.9	46.7	39.2%	14.1%
Female	195	48.0	3.5	2.3	1.4	91.3% <sup>3</sup>	75.4	74.9	14.4%	10.8%
Spouse	198	37.0				98% <sup>2</sup>	28.1	75.3	15.1%	9.6%
Avg. Heads		46.8	5.7	2.6	1.7	3.9	84.2	60.7	26.9%	12.4%

From all participated in survey 50 % are from MHH and the rest 50% are from FHH. From those participated in qualitative study (FGD, interview) 80% are from MHH and 17.6 % are FHH, which is equivalent with the average FHH of the region, that is 18%. Average household size in the surveyed kebele's was 5.7 this indicates on average each family expected to have food enough to this large family size. In order to supply enough food for

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<sup>&</sup>lt;sup>1</sup> Determines amount of work available by age and labor contributed to farm/livestock. Age 5 to 15 counts as half and work status counts as half if part-time, 1 if full-time. For example, a 14 year old working part-time would be .25 work equivalents.

<sup>&</sup>lt;sup>2</sup> Married

<sup>&</sup>lt;sup>3</sup> Separated/divorced/Widowed

these large size farm families, backyard crop livestock production play crucial role through making available fresh and Varity of food at home.

Intern household production is dependent on availability of household labor. But the work equivalent (Determines amount of work available by age and labor contributed to farm/livestock.) was 1.9 and 1.4 for MHH and FHH respectively. Which shows majority of household members in each family are either below the age of 15 or didn't work full time so didn't contribute much for household food production. This confirm shortage of household labor accompanied by high fertility rate crates high work load on females, MHHs had larger households and more family members (son's, daughter's, relatives, and non-relatives) than FHHs in all surveyed sites. This situation is similar in most developing countries where FHHs have been found to be smaller than MHHs (Buvinic, Gupta, 1997). Significant number of female participant of FGD come with their brust feeding children.

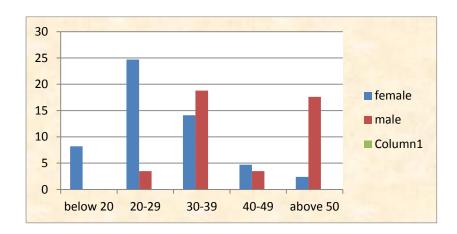


Figure 4-1 age profile of respondents

The average age of household head was 45.6 in MHH and 48 in FHH. Moreover the average age of wives in MHH was 37, which is significantly lower than that of their husband. Women dominated in the age group below 20 and 20-29. Whereas med dominated in the age groups 30-39 and above 50

#### Education

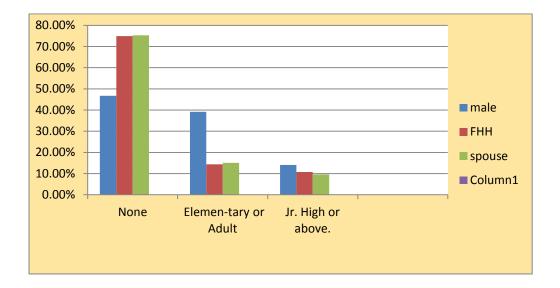


Figure 4-2 Education levels of respondents

About 74.9 % of FHH and 75.3% from MHH, were illiterate. Where as only 45% of men were illiterate. Men respondents dominated in elementary and higher education. The FGD revealed age and education level are important on household decision making.

## 4.2.1 Land holding Size

Average lands holding size of sample farmers was 1.19ha. Average landholding was 1.06ha for FHH and 1.32ha for MHH. Moreover, household land/backyard was 0.53ha. and 0.42ha. for MHH and FHH respectively. Moreover the table showed FHH rent out their land where as MHH rent in land

Table 4-2 land holding by household head

Household	Total Owned	Share Crop/ Rent Out	Share Crop/ Rent In	Crop Land Managed	Soil Quality 1=Poor, 3=Good
Male (n= 202)	1.32	0.04	0.31	1.59	2.36
<b>Female (n=192)</b>	1.06	0.17	0.09	0.98	2.43
Female to Male Ratio	80.3%	425%	29%	61.6%	103.0%
Average	1.19	0.10	0.20	1.29	2.39

. Female to male ratio was 80% and 61.6% before and after the farmers rent out/rennin their land. Similar to the above table the qualitative data showed FHH rent out their land for ox plowing and input requirement of the land and share the harvest with somebody who rent in. At FGD one respondent from FHH revealed.

"After my husband passed away I negotiated with my son in low to plough my small land with ox and to cover input requirement of the land and he will share the product with me. While they only plough the land, I did the rest of the work. However my share of farm product is very small. I also dependent on him for market my harvest"

The primary reasons identified for FHH to rent out there land were to satisfy input requirement of at the plot and lack of oxen to ox plow. Moreover, culturally it is a taboo to a women to plow

Data from study area showed land managed by women are relatively fertile than those managed by men. FGD with men and women participants also conform this, backyard plot is

relatively fertile than other plots. Women farmers spend more time at their plot than men and they contribute great deal for maintaining the fertility of land.

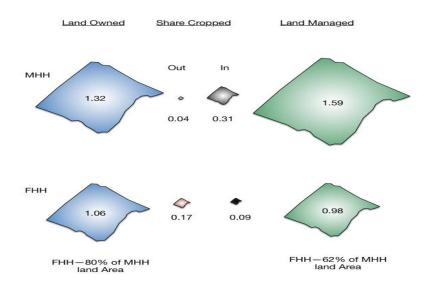


Figure 4-3 ration of land rent out

# **4.2.2** Income

**Table 4-3 Emergency funds** 

Decision	Raise 500 Birr in one month?						
	Husband Wife		Female Head				
1—Very Possible	46.0%	20.2%	25%				
2—Somewhat Possible	31.8%	37.4%	33.7%				
3—Not Very Possible	17.7%	30.8%	28.0%				
4—Not Possible	4.6%	6.6%	12.2%				
5—Don't Know	0.0%	5.1%	1.0%				
Observations	198	198	196				

The table justifies unlike the premise that the house act like one, there is separate source of income and control between men and women. 46% of men and 20 % of female from MHH and 25% of FHH able to generate 500birr or above per month. Moreover majority of female response lay at the second category (ie 37.4% and 33.7% of female from MHH and FHH respectively can generate up to 500 birr or more for some months of the year). This showed women can contribute to household food security and income if their structural barriers are properly addressed.

#### 4.3 Gender-Based Domestic Division of Labor

Sexual division of labor is one of the structural elements in the region. In line with this activities at the crop farming are primary considered as men's duty. Women are usually considered as helpers of men on the farming activities. Household chores and backyard activities pertaining to gardening and care of livestock are generally considered as women's duty.

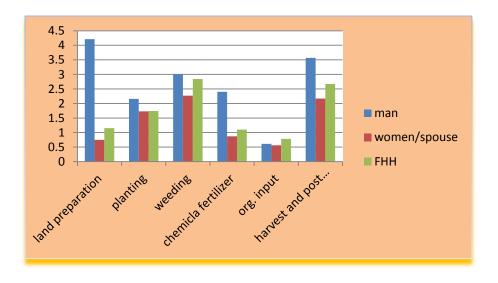


Figure 4-4 sex disaggregated work activity, crop farming

Many labor intensive agricultural activities such as weeding, harvesting, applying organic fertilizers threshing transporting and storing require the active involvement of women

alongside men. Women contribute about 35 % of the labor requirement of crop farming. Particularly men dominated farming activities like ox plowing, input use,( inorganic fertilizers, improved seeds, ...) as well as marketing of farm products. Moreover men overestimate their labor contribution at 95% level of significance

Moreover only 28.1 %, 75.4% and 92.9 % of female in MHH, FHH and male respectively consider their primary activity is crop farming. Similarly FGD revealed despite their active involvement in the agriculture women are not considered as farmers (ie crop farming). Men participants of FGD, when discussed about women's role in crop farming, besides other indicators they frequently used words like she help me doing this....., This shows men consider women as their helper in the crop farming. Majority of men FGD participants, do not believe a woman can do crop farming by herself. On the contrary women don't perceive their potential similarly, at FGD one woman revealed

"I did go to school for a while; however, my parents decided I should get married at thirteen. Ever since I could remember I have worked on a farm, first with my parent and then with my husband. There is no farming activity that we(women) can't do. Our husbands cannot do anything without our help. we are much more hard workers than men,. In fact it amazes me how women do most of the work on the farm, and only men get the title of a farmer. It always annoy me to see men underestimate their wives contribution at the farming"

Data showed there are particularly three activities at the plot that men dominated ox plowing, input use as well as marketing of farm products. These have cultural, social and economic implications which shaped the existing farming system, or vise versed. These are centers where power and dominance entertained in rural agrarian society. This is because

- In most communities the word 'farmer' is defined by someone who can independently
  engage in the activities of plowing and sowing (Frank, 1999). The discussion revealed
  culturally it is taboo to women to plow
- 2. The current, agriculture extension approach emphasis on increasing use of input. Moreover rural credit from MFIs usually directly or indirectly related with input use and adaption. Women from MHH have little information regarding input market(where and how to ask for input). Input market and adaption controlled by men. In agreement with this,
- 3. Social norms systematically limit the options available to women (FAO,2010) and men dominated crop marketing (seller, buyer, broker....)

#### 4.3.1 Labor at household

Agriculture in the study area is based on the cultivation of small grain cereals Women also seem to participate in more tasks in less complex societies (Burton,2004). The same holds true for the study area. Men focus on farming; women (including FHH and spouses) split their time between domestic work, food preparation and farming. Female Spouse work the most with 11 hours a day. Female Heads work 10.5 hours and Male Heads work 9.5 hours a day

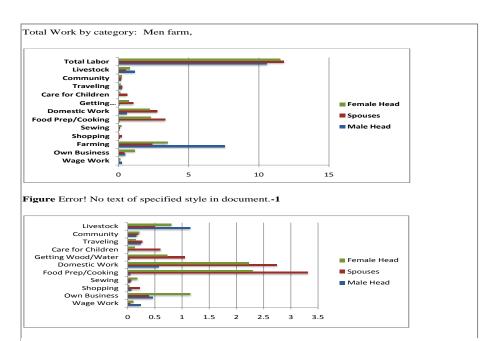


Figure 4-5 household division of labor

FGD also revealed household chores pertaining to care to family members and maintenance role are generally

considered as women's duty. As farming attached with masculine role household chores are also attached with feminine role.

## At FGD with women one participant mentioned

In our village household duties are considered as "yesetaset sira" which mean women's duty and men don't help us much at a household work. Those men who try to help his wives are labeled as "setase", "asedabi" by the locality. However men and women do equally at the farm plot. There is no work that men do and we can't do

The above discussion indicated traditionally household duties are labeled as "yesetaset sira" which mean women's duty. The word attached with social values that are accepted for women but taboo for men. The support of men at a house related work is limited to activities that require high labor power like plowing, fencing, digging hole, harvesting pasture crops and sometimes in some households men may help women if she is busy or pregnant at tying and untying of cattle, preparing compost and sometimes fetching water.

The figures below revealed the multiple responsibilities women shouldered. And the concentration of men's labor on nothing but farming. If we take out farming, men's contribution to household activities found to be small. This has implication on availability of time for farming training; extension advice; input use and adaption; technologies and other

#### 4.4 Household assets, access and control and decision making

The next discussion focused on access and control profile of respondents on selected household assets. The above table showed women and men access and control on selected household assets. Women have lower access to all major assets. The average number of

rooms for both sexes was 2.54. Male have better access to improved stove, radio and mobile phone than women.

Table 4-4 Selected housing, assets and travel time

							Distar	nce to Loca	tions (N	Minutes)	
НН	# of HHs	# of Rooms	Impr. Stove(%)	Radi o (%)	Mobile Phone( %)	Sickle	Total Value (Birr)	Coop	ACSI— Voucher	MFI	Market
Male	197	2.54	40.6	42.2	60.3	2.74	673	37	34	56	56
Female	194	2.24	36.6	30.9	46.3	1.94	376	37	34	54	55
Avg of head			38.8	36.5	53.3	1.50	525	37	34	55	56

Money value of household assets controlled by male (673 birr) is almost twice as much as that of female (376 birr). In agreement with this FGD revealed women have poor access and control to household assets than that of men.

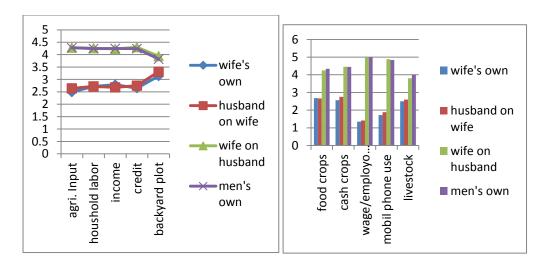


Figure 4-6 decision making at the Intra

As indicated on the above figures, men dominate decisions regarding agricultural inputs, household labor allocation; utilization of household income as well as credit. However on issues related to backyard cultivation, men's influence come to shrink and women's contribution increases. Moreover women contribute significantly in all decision making process, however its men that make the final decision or dominate the entire decision making process.

Attempt has been made to find out decision on crops at the backyard and others like employment and mobile phone. The result showed women dominated decision on backyard crops used for home consumption. However men dominated decision in all indicators

#### 4.5 Conclusion

Survey analysis confirms that women are time and asset constrained. Females have a lack of time, labor, education, and other assets. This has implication for household decision making which implementation of any development program should consider.

Women are time constrained. Men focus on farming; women (including FHH and spouses) split their time between domestic work, food preparation and farming (not shown is water

and firewood collection). Female spouse work the most with 11 hours a day. Female Heads work 10.5 hours and Male Heads work 9.5 hours a day

Unlike their active involvement in crop farming (contribute about 35% of labor requirement) women's effort didn't get the appropriate recognition neither denied the right to entertain products. In all indicators women have low access to household assets which worsen by low decision making in a houshold. But the study revealed women have better decision making at backyard plot, production and execution of the product. The sector serve as source of income to majority of women in rural areas of the region.

Unlike the premise household function as unite, there is separate source of income between men and women. Different control and access to household assets reveled in the family.

Moreover female in MHH have better access to household land than that of FHH. FHH have not only smaller land but also they rent out their land for ox plowing and input use at the plot and forced to share the harvest with the one who rent in. Even if they still involved on different activities of the crop farming, data showed their share of harvest is very low. So interventions should consider low access to resources as well as low bargaining power of FHH

## 5 BACKYARD PRODUCTION AND WOMEN

#### 5.1 Introduction

The chapter deals with underlying causes such as socio-cultural issues that determine the gendered situation of access and control at the study area in. particularly in relation to backyard crop and livestock production. Attempt has been made to discuss women's perception, idea and believe regarding backyard crop and cattle production and its contribution to the family in general and women in particular. The topics try to justify linkage between backyard farming and women from different dimensions. So the subtopics are not mutually exclusive

# 5.2 Association between backyard and women

Traditionally women bear primary responsibility for household sustenance and well-being. The culturally ascribed role of women as mothers and wives includes not only reproductive work of child bearing and rearing responsibilities but also, for the daily of the labor force and maintain the well being of the family. In line with this women in the study are employed backyard crop/livestock production to maintain livelihoods and protect household income through subsistent production.

Researches on sexual division of labor, in 1970s, placed emphasis on restriction due to the reproductive specialization of women. Brown (1970) emphasized the compatibility of women's tasks with simultaneous childcare responsibilities. Women's tasks are likely to be relatively close to home, not dangerous, and interruptible.

Data from study area agreed with this fact. Labor is the major input in traditional labor-intensive home garden activities and women contributed most of it. Women involved in activities closely associated with their household responsibilities. Its closeness to the house allows women to cultivate crops and livestock of their choice. The cultivation is diversified and linked with the household need for food, feed to cattle and social needs.

Traditionally household activities and taking care of crops cultivated at backyard and livestock kept at home considered as women's duty. It was reported that women spend on average 3-5 hr. per day at their backyard. The survey result also justifies the same. Women spend about 85% of their daily labor at a household duty (figure 5.1). However figure 5.2 justifies 84% of men's day activity at the house hold activity is eating and sleeping only

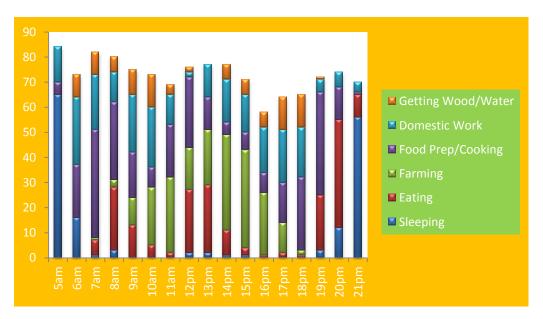


Figure 5-1 typical work day – 93HHs, spouses – 6 activities 78.4% of all activity

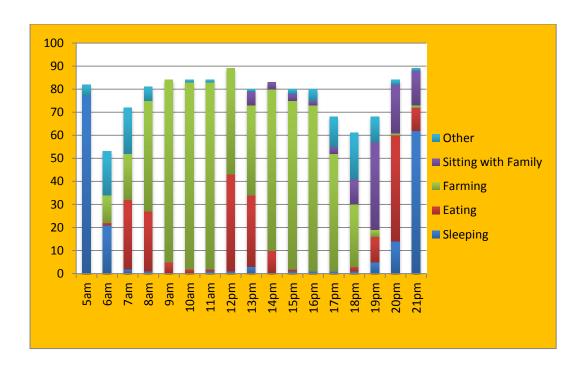


Figure 5-2 male spouse – 93 observations – 5 main categories 84%

(Burton etal, 1977) proposed ... entailments chain within production sequences, An example from agriculture: if women clear the land, they also prepare the soil: if the latter, they also plant, tend crops, and harvest. If they tend crops, they also fetch water, and if they plant, they also prepare vegetables for cooking.

In agreement with this, women are heavily involved in all aspects of backyard crop and livestock production (home garden and cattle kept at home), from selection of crop/livestock to day to day maintenance tasks to decisions regarding how to use the output. Women work with passion in selection of those crops that have **high demand at the market** and require low input and labor. Men's in household are generally responsible in the heavier tasks (land preparation, fence building, well digging and tree harvesting), while women manage the day-to-day maintenance tasks. These agreed with Women spend considerable amount of their time at the backyard. Soil fertility of home gardens is maintained by manure of livestock and kitchen waste and it is the responsibility of women in fertilizing the soil with organic

manure; land preparation of crops especially vegetables, fruits and spices. Women also responsible for day-to-day maintenance tasks of herding, shed cleaning, hay processing, milking and milk processing, feeding and watering of livestock and tending sick animals kept at home. Figure 4.1 showed multiple responsibilities women shouldered in a house and at field plot. Men focus on farming; women (including FHH and spouses) split their time between domestic work, food preparation and fetching fuel and water.

Boserup (1970) hypothesized that agricultural intensification has a negative impact on female control of economic resources. This research suggests high female subsistence contributions are a necessary prerequisite to females control of economic resources, and to women's freedom of choice in life events. Women in the study area implement various strategies to satisfy their need for production and backyard crop and livestock production ... is one of those methods most women implement with in limited resources they have.

Through group interaction women motivated to express their feeling towards backyard farming and its contribution to women empowerment. Women's motivation for backyard cultivation emphasis on benefits of the sector on development of independent feelings, decrees dependency of women on her husband, decrease worry from what to feed kids as well as enhance self stem and develop felling worthiness ....... However men's discussion inclined to benefit of backyard cultivation for its serving as insurance in case of contingency, decrease expenditure at home for food.......

Table 5-1 motivation to backyard cultivation- women and men response

	Women's response	Men's response
. Motivation for cultivation	Production of food consumed at home ( not to worry what to feed kids  Diversify consumption, Enhance nutritive intake  Decrease dependency on husband for her and her family basic need	Production of food consumed at home (decrease expenditure for food  As insurance in case of crop faller  To generate income that support expense for input like fertilizers, farm bull, labor and others Support expense for input and others used at farm plot

Data from FGD, as summarized on the above table, female are motivated with ability to satisfying household need from self-production; so that food intake is enhance both in quantity and quality.

The practice also increases women's decision making in the family. Women play active role in the choice of crop cultivated and livestock kept at home. Women influence the production, use and sell of backyard products. The practice also contribute to manage household power relationship through increasing womne's influence in the house. For example women in Bachemo and Addisna Gulit kebeles able to educate their kids by the income generated from sell of milk and milk products; vegetables. Backyard products in Bachemo kebele support expenditure for input like fertilizer. Women in Awre keltafa fatten sheep and able to have meet for holidays and generate up to 1000 birr from sell of ram.

Moreover field data indicated backyard production increases women's status in the locality.

At FGD a women from limichim kebele states

"because of my backyard products now I am better than any of my neighbors. I have milking caws and bull fatten at home. When I sold them I get good ransom of money. I

get respect from the local community because I sold fatten bulls and sheep in chip price at the time of crop faller"

Women involved in backyard cultivation gain recognition from the locality not only for their contribution to the family expenditure for input but also they managed to help others at time of food shortage.

FGD with both men and women farmers revealed women have sound knowledge on the backyard crop and livestock production system. They are able to manage production with minimal or no input from market.. For example during FGD with men participants at Awrekeltafa Kebele revealed women prefer cultivation of Dagusa than teff, this is because dagusa require low labor and input than teff. Its market price didn't fall like that of teff. The discussion with women

Between coffee trees we grow fodder trees which, besides serving as feed for the cattle, also used as shed to the coffee planted on the plot.... caw dung and wastes from cattle is used as organic fertilizer to the backyard plot; as fuel and also to mend the floor and wall of the house. ... We also like to grow leafy vegetables, corn and sorghum at the backyard because it is not only primary food to our kids but also the byproducts are source of feed for cattle and small ruminants ...and used as fuel for cooking Most chicken and cattle for fattening are also found from eggs hatched and new born calves from the farm

The above discussion showed diverse crop/livestock species kept in the same land. The divers' species are selected for multiple benefit they gave to the household and for their supporting each other. The cultivation is self satisfying for its demand for input, and other needs so there is minimum or no use of inorganic fertilizer

At well developed backyard crops that have high market demand and provide aggregated benefit are selected and cultivated. Both men and women respondents indicated women are better at choice of crops, proper use of resources, low cost of production, innovation at the production system (fertilizing the land, replication...reproduce ...way they handle challenges) and high productivity

Backyard cultivation also related with risk averting nature of women. Unselfish motherhood nature of most Ethiopian mothers valued the welfare of the family before personal gain. Similarly, backyard farming is preferred by women for its low cost of production, **low risk of crop loss**, **low requirement of input and technical expertise**. Women prefer crop/livestock that are less susceptible to crop loss and disease. Usually they keep their product at small number. Women prefer diversification over specialization due to market and other reasons ( when production increases women lose their control). Similarly backyard cultivation characterized for its diversified indigenous management that use low input, (high productivity per head per input use but low production for limited output) add evidence

Women backyard production contribute for organic farming, increase fertility and decrees deforestation for fuel. Most use "kubet", branch and leafs of trees and by products of corn and other crops as fuel. Some even live on sell of backyard this fuel means. Utilize household and shade waste products to fertilize the land. Their best fertilizer is their hands and feet. They spend considerable amount of time at backyard every day add evidence

Even if it is the women and girl children of the family that usually work on back plot on day to day base, the activity is dependent on men for its input and market

Data from FGD also demonstrated its men/husbands that have access to inputs as well as extension service. In MHH men control marketing and use of inputs like fertilizers, seeds and

cattle fatten at home. Some women have access to credit to crops cultivated at backyard and to cattle kept at home. However irrespective of who get credit, its men that control use of credit from credit associations. Since they are the one who go to market to buy cattle fatten at home.

# 5.3 Objective of backyard cultivation

The objective of backyard cultivation is varying from home consumption to generating income. Question asked to find why they are involved in backyard cultivation. The response of most women related to satisfying triple role of women. That is reproductive, productive and community management.

Data from FGD and other sources indicated production of food for home consumption is always given priority in backyard cultivation. The women believe the activity increase women's access to fresh food so; enhance nutritive intake of the family and also generate income that can be used to fulfill household food requirements that are not produced at home, like salt, suger, oil....

After they learn from extension workers, women in the region also grow and consume new introduced crops with existing ones (women in awrekeltafa, adisna gulit,anguti...) Crops like cabbage, potato, tomato, banana and others help to add additional flavors on the daily diet. Vegetables enhance the nutritive intake of the family and women, which were ones considered as poors' diet in the region. Some crops brought change in feeding habit and able to replace food items that are expensive at market by backyard products. For example in Awre keltafa kebele (as one respondent states), backyard growing potato replace pea from market in making wet.... chicken and egg besides their market value also consumed at home to enhance nutritive intake of women.

Women in the study area also have Community management work involves the collective organization of social events and services. In line with this some crop livestock that are common at most backyards of the region are *geshoo*, coffee, egg, *kubet* as full...are cultivated to satsfay the social/cultural events and holidays, *tezkar*, *zikir*....

# 5.4 Backyard farming is important means of income and saving for a lot of women

In the traditional patriarch society women systematically denied their access to means of production. At the study area women have poor access to means of income. Both farm and off farm incomes are controlled by men in MHH. In line with this women's income means are related to activities at home.

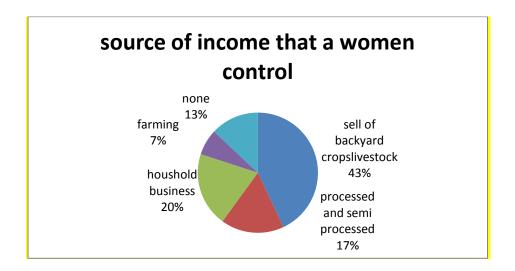


Figure 5-3 major sources of income to women

In MHH men control income from farm plot and sell of back yard products like tree, fruits, and other crops that have high market price. Sell of bull, calves and other cattle are also considered as men's duty. Women's income are mainly from those products that have low market price like vegetables and usually sold at small amount at a time. Moreover women

from FHH usually rent out their land to others and share the harvest. But most suffer from low share of farm output

In line with these women employ strategies like backyard cultivation to satisfy their need for production and income

- For women both in east and west Gojjam zones, backyard cultivation is the main source of income that the women control. They sold vegetables like onion, leafy vegetables, potato, gesho and other spices grown at backyard. Some women also able to generate income from sell of egg and chicken, milk and milk products and fodder crops and their seeds, kubet, fire wood.... Women from FHH also entertain income from sell of ram.
- Some women close to cities also generate income from household business like sell of tela,
   areke, spices....

Table 5-2 women income and credit

Source of income women control	How they use the income	Where and how sold	Credit access women prefer
1 <sup>st</sup> sell of backyard crops, egg, milk and milk products  3 <sup>rd</sup> sell of chicken, sheep goat and other cattle  4 <sup>th</sup> spices and others processed at home  4 <sup>th</sup> home based business like areke, tela,	1 <sup>st</sup> . to buy food items consume at home.  2 <sup>nd</sup> invested on kids education, health and others  3 <sup>rd</sup> used to satisfy personal need  5 <sup>th</sup> used to support family expence for input and others  4 <sup>th</sup> saved	Most products are sold at a local market; or nearby cities or at a door stapes( directly from the farm)	1 <sup>st</sup> equb  2 <sup>nd</sup> revolving fund by NGOs like credit for sheep fattening at Lalibela kebele  3 <sup>rd</sup> credit access by ACSI  2 <sup>nd</sup> revolving fund by NGOs like credit for sheep fattening at Lalibela kebele  3 <sup>rd</sup> credit access by ACSI

## 5.5 Gender difference in the home plot

#### 5.5.1 Labor

Labor is the major input in traditional labor intensive home garden activities and women contributed most of it. Traditionally household activities and taking care of crops cultivated at backyard and livestock kept at home considered as women's duty.

In relation to backyard crop and livestock production men involvement limited to fattening, collecting pastor and other heavier tasks like land preparation, whole digging and tree harvesting while women manage the day-to-day maintenance tasks.

## 5.5.2 Choice, production and execution

Moreover question asked to find out if there is gender difference in choice of crop/livestock produced. There is gender difference in the choice, production and execution of backyard products. Respondents also asked to compare and contrast backyard farming and crop farming. There response indicated

Data from field indicated there is gender difference in the perceived advantage attached with the production system. 50% of women rated in favor of backyard crop and livestock production; 16.7% in favor of crop farming and the rest 33.3 % rated for other activities or both. Whereas 90% of men respondents rated for crop farming.

There is also tendency of naming some crops as men's and others as women's. Women have more control on those crops and livestock that are named as women's. Data from field revealed crops that rated as women's are those mainly consumed at home, require less cost and labor to cultivate, use low input, have relatively low price at market and are usually cultivated in limited amount. However men found to control whole sell of products and those that generate high income.

Products of home garden (garo) that are used for **home consumption** had been managed and controlled by women. Women usually control use of backyard products like sorghum, corn, sugar cane "ageda" vegetables, fruits, forage plants, coffee, "gesho", fire wood (leaf and branches of trees), "kubet", small animals like sheep, chicken as well as egg, milk and milk products.

Table 5-3 crops and livestock- men's and women's

		Discussion	Production
			constraints
Crop/cattle  Considered as women's	leafy vegetables, root crops some fruits like banana consumed at home, geshoo, women tend to control smaller animals, such as goats, sheep, and poultry like sheep pasture crops	Have low growing season, have high demand and low price at market, limited production  Low investment for input  Require low input cost, less power to cultivation and market  Primarily consumed at home and only extra products sold at market	Low Labor at home  Lack of water for dry season cultivation  Poor access to information and improved seeds
Considered as men's	men are responsible for keeping and marketing large animals, as cattle, horses and camels  Cultivation of trees, fruits like papaye, cash crops	Take longer time to grow Have high market value in whole sell, require higher labor and input for production and sell of products	

## 5.5.3 Utilization

Unlike women's role in the crop farming and other off farm activities, women in the study area control the production use and execution of products from garo (backyard) and usually

abele to use the income as they choose. Woman decides what is to be planted, provides the labor, and she controls the production from the backyard garden. Most of the produce is used for household consumption but she may also sell this produce for cash, which in most cases she reinvest the income at household food. Women also tend to own and control production of small ruminants and poultry

Data from study area showed Products of home garden (garo) that are used for home consumption and low daily income had been managed and controlled by women. In the region there is tendency of grouping crops as men's and women's Women usually control use of backyard products like sorghum, corn, sugar cane "ageda" vegetables, fruits, forage plants, coffee, gesho, fire wood (leaf and branches of trees), kubet, small animals like sheep, chicken as well as egg, milk and milk products. However this is not absolute. Evidence suggests that if there are limited production of crops and small number of these animals, women will maintain control over them. However, if the numbers increase, men will generally take over. men and women also differed in how they reportedly use garden products, with women favoring household consumption versus sale. Women cultivate for household Low market-value crops or livestock product are controlled and managed by women, where as cash crops like chat, trees and big livestock like farming bull, caw, sheep are marketed by men. Men control sell of products that have high market price. Men also control market and use of inputs used at farm plot. Women income at the study area were more dependents on vegetable, like cabbage, onion root crops, potato, carrot fruits, gesho, coffee spices, forage plants and their seeds than cash crops. Egg, chicken, milk and milk products also sold and controlled by women. Moreover WHH also entertain use and sell of small ruminants like ram

The difference between men and women also inters to how they use the money generated from sell of farm products. Women usually reinvest the income generated at a household food or on kids or other social affairs. Most income reinvested on food items that are not produced at the farm like salt, sugar, cooking oil, kerosin. And extra income, if available usually invested on kids education and clothing as well as to satisfy personal need for clothing. Only extra income is saved at ekub, edir the like. Moreover FHH are better on saving than MHH

#### 5.6 Emerging trends in backyard crop and livestock production

After they learn from extension workers, women in the region **grow and consume new introduced crops with existing ones** (women in awrekeltafa, adisna gulit,anguti...) Crops like cabbage, potato, tomato, banana and others help to add additional flavors on the daily diet. Vegetables enhance the nutritive intake of the family and women, which were ones considered as poors' diet in the region. Some crops brought change in feeding habit and able to replace food items that are expensive at market by backyard products. For example in Awre keltafa kebele (as one respondent states), backyard growing potato replace pea from market in making wet.... chicken and egg besides their market value also consumed at home to enhance nutritive intake of women. Backyard crop and livestock production give a fertile ground to introduce new crops and livestock to the farmers.

There is increasing awareness on contribution of small scale backyard cultivation for household food sustainability. In line with this farmers implement different mechanism like water harvesting to cultivate during the dry season. Introduction of irrigation or use of water pump for backyard cultivation brought significant difference in the production. Those farmers that have access to irrigation able to harvest two to three times in a year.

Even if It's the women and girl children of the family that usually work on back plot on day to day base, there is growing awareness and involvement of men on the Practice in recent years. The involvement of men on backyard production is attributed to one of the following three reasons

- 1. Land less cultivation. If backyard plot is the only land available to cultivation. Eg. Young men in awrekeltafa kebele that has no land to cultivate also involved in fattening of sheep with their wives
- If market is not available in the locality and sell of product required travel to town every dayEg. Milk production in Bachemo kebele, men brought the fresh milk to cities to sell
- 3. market oriented cultivation of crops and cattle
- i) high income generating activities like cultivation of trees, cash crops like chat, coffee; fattening,
- ii) If the cultivation involve irrigation, or other technologies and the product generate high income at whole sell. For example vegetables cultivation in Anguti kebele

FTS provide practical training regarding cultivation of vegetables, cooking techniques.....

Access to credit contribute to economic empowerment of young women found near to cities

- Some NGOs provide improved ram and ewe fatten by women.
- Some buy pump to cultivation

But credit don't benefit in other areas due to poor linkage with service providers... like that have access to credit

#### 5.7 Conclusion

Women play active role in the choice of crops cultivated, cattle kept at home; fertilizing the soil by manure of livestock; cleaning animal barns, feeding, watering, milking, milk processing and looking after poultry and small ruminants. Men are primary involved on farming activities at the farm plot. The support of men at a house related work is limited to activities that require high labor power like plowing, fencing, digging whole and sometimes in some households men help women if she is busy or pregnant at tying and untying of cattle, preparing compost and sometimes fetching water.

Backyard farming play important role in production of food consumed at home; enhancing nutritive intake of the family; decrease deforestation through providing fuel source (trees grown around home, animal manure cake (kubet) as fuel) and generating income

The practice particularly linked with household responsibility of women. Its closeness to the house and its indigenous management system create opportunity to resources poor women to to grow crop livestock of their choice, which is impossible on the ox farm plot.

When women discussed on the benifites and contribution of backyard farming. Their response showed the potential of the system in managing household decision, decrease dependency so contribute to psychosocial well being of women; satisfying role expectation Production objective of women from backyard farming is related to culturally ascribed role of women as a mother and care taker. Production of food for home consumption is always given priority in backyard cultivation. The women believe the activity increase women's access to fresh food so; enhance nutritive intake of the family and also generate income that can be used to fulfill household members need. It also increases women's role performance. But

limited production give little or no space for saving, which is required by micro credit institutions

Even if It's the women and girl children of the family that usually work on back plot on day to day base, there is growing awareness and involvement of men on the activity in recent years. The involvement of men on backyard production is attributed to one of the following three reasons -If backyard plot is the only land available land to cultivation; If market is not available in the locality and sell of product required travel to town every day; If the cultivation generates high income.

The practice contributed to women empowerment through

- 1) As livelihood ..., cultivation of food to home consumption; Generating income
- Manage power relationship in the household.. Increase decision making, decrease dependency
- 3) Acceptance they get for their contribution to the family and community ... men like the contribution of backyard to cover expense to fertilizers and improved seed

When we come to utilization, women's influence and benefit decreases. Women's control production and use of crops and livestock that have law market value. Like vegetables, fruits, coffee; gesho; fuel means and small ruminants; chicken egg..... those that generate high income are managed and controlled by men. If the production increases men generally took over the system. In some villages men control the income generated by women's effort

Little improvement on the production, but new emerging trends in the system are

- cultivation of new introduced crops like vegetables; exotic breeds of cattle; improved forage crops, help to enhance nutritive intake; generate income...
- coverage of land by trees that require law water for dry season cultivation

#### 6 OPPORTUNITIES AND CONSTRAINTS TO WOMEN FARMERS

#### 6.1 Introduction

Women's perception regarding opportunities and constraints discussed here. Besides different constraints discussed on the previous topics this topic particularly discussed about various socio economic as well as institutional barriers that affect women's production activities.

The chapter also includes data from need assessment survey. Need assessment is conducted with the objective of finding out factors that motivate or hinder women's role in the production. Various factors that influence women are listed out from the FGD. Then respondents asked to rate the factors as how important the issues are and to what extent they are satisfied with the service

### **6.2** Factors that affect women production

The various factors that influence production are related to one another. It might be difficult to find out single cause and effect relation to each influencing factor. Therefore it is important to consider the holistic nature of the influencing factors and it is also important to find holistic solution to address the issue. Most of the challenges to women are related to lack of appropriate acceptance to the women's potential in production activities. Such attitude is reflected not only in the locality. However government officials also found to influence by this.

Women are disadvantageous in all lifestyles. They have poor access to assets like education, land, income, information and others. Considering poor access to income to women farmers, their success from the sector depends on the support they get from governmental and nongovernmental institutions. The traditional patriarchal society alienates women from major

sources of production. Land and income from farm plot, sell of big livestock even the credits are controlled by men.

During FGD with women participants. It is observed whenever a local man approach the discussion, participation of women shrinks. On the contrary presence of agriculture development agents, irrespective of his sex encourage women to communicate their concern. This mean women in the village might not be open up in the presence of their husband or other that might "jug" them. Sex of worker by itself is not influence

**lack of gender sensitive approach at extension** service may end up creating additional burden to women and may contribute to more gender oppression rather than benefiting women.

However experience showed gender segregated interventions by NGOs found to be effective in enhancing women's status. Backyard cultivation when supported with technical and financial aids the women managed to generate income which satisfy their and their families' need. For example women in Awre keltafa managed to generate upto 1000 birr from sell of ram fatten after they get exotic breeds of sheep from NGOs operating in the locality. Women in bachemo kebele grow potato and onion by the credit they get from ACSI. Some also take credit for fattening of sheep, chicken, farming bull, caw and others which help them to enhance their standard in the society. Access to technologies like improved seeds, fertilizers, high yielding breeds, water pump, irrigation and improved means of production also create opportunity to women to channel their energy and time to productive work( eg. bachemo, limichim, addisna gulit kebeles).

Women from FHH also have better access to extension service and are able to generate income than women from MHH. Women in MHH have low access to extension service and usually concentrated on production for home consumption. Even the services are focused on crop farming As Emlia frank,(1999) states

"With few exceptions women who head households are considered weak farmers and information regarding inputs as well as the actual inputs themselves are rarely distributed to women. If resources such as credit/fertilizer/extension services are perceived to be in scarce supply, then applications for inputs from farmers considered to be 'weak' due to resource disadvantages (i.e. poverty), physical disability or gender based (P.27, CISP, 1997)"

Data from FGD also showed input use in the study area is dominated by men. The overwhelming perception by men Peasant participated in FGD is that women would not be able to utilize input as effectively as male farmers which impede women's access to these resources. In MHH significance number of women believe they have better knowledge than men farmers and are able to produce better with limited input and technologies

Culture is another barrier that contributed to women's alienation from income generating activities and reinforce structural barrier on women. FGD reveled

- 1. At FGD men participants mentioned the locality teased at them if they try to help their wives in household work. On the contrary the female participants of FGD reveled the high work load they shouldered and the importance of men helping them at home.
- 2. Moreover the culture encourages men to control all income of the family. Even the income generated by women's own labor is usually managed and controlled by men. Women are not considered as good at decision making

The agricultural extension program follow family centered approach. The family centered approach operates with the understanding that "the process of demonstrations and guidance should be designed not to target farmers as individuals but as representatives of the household" (CISP, 1997). It lacks giving appropriate recognition to the various structural and cultural constraints that women farmers , especially those from MHH, face. There is no women farmers program

The interview with zonal and woreda Agricultural offices showed there are limited programs and interventions that targeted women. Even those programs focused on hygiene, food preparation, soil conservation and others that give recognition to reproductive and community management role of women rather than their need for production. While these programs have value, eventually, they reject the importance women have in the food production process.

Moreover women in the study area asked on programs or extension advises that favor them most. Their response give importance to extension programs on cultivation of vegetables and fruits, water harvesting methods, animal husbandry, technologies that save energy and time...all the above issues related with home based agriculture. This agreed with, Ministry of Agriculture, (1992) on research done personal communication with women farmers reveled

When women are asked on which topics they would like to receive extension advice major topics include home gardening, animal husbandry and poultry production

Data from study area reveled 50% women from study area prefer backyard cultivation than crop farming at the farm plot. On the issue (Frank, 1999) states

Even if the women mention in its growing importance for the family sustenance, backyard cultivation is considered as secondary activity of farmer or (as means to

rehabilitate of poor farmers) by policy makers, government officials, And others working among the local community. Such attitude shows the poor acknowledgment given to women whose labor is invested on the activity.

At the study area, labor intensive agricultural system is characterized by minim use of technology in the production system. Serious of structural barriers women farmers faced augmented by local cultural perceptions, didn't create opportunity to women used technologies or technological products in their production system. Like limited access to information and land, limited access to agricultural inputs and technologies severely constrains the productive ability of women in general, and female headed households in particular.

Women in the region are not open and don't reveal themselves in mixed sex meetings. This is clearly observed during participatory methods like FGD. During one FGD with women participants, women's participation shrinks if men from the locality come close to the discussion area. So separate sex communication which consider context and setting is important to enlist women's attitude prescription and need

Productive activities of women is mainly concentrated on backyard cultivation and the production system use indigenous knowledge and hand tools for cultivation. The farming system is labor intensive system with minimal investment of capital. Women farmers believe they can produce more in small back plot than what their husband produce from farm plot if they get the right support from concerning bodies. For example

Women prefer production activities that have low risk of crop lose, law cost of production.

Due to high cost of fertilizers and the risk of crop loss most women prefer law cost inputs like manure of livestock and kitchen waste rather than inorganic fertilizers, bought with high

price, even if it limited their harvest. They make seedlings at the backyard for future production. Usually eggs are hatched and calves are born and raised in the house.

#### **6.3** Need assessment

Need assessment is conducted with the objective of finding out factors that motivate or hinder women's role in the production. Various factors that influence women are listed out from the FGD. Then respondents asked to rate the factors as how important the issues is and to what extent they are satisfied with the service. Respondents' rated each factor twice from 1 to 4. Their response/rating is summarized as resources that are available in the locality to women and issues that are found as concern by the women respondents.

Land, water and labor are three most important issues frequently mentioned by women's as factors that affect their effort in the production (as described by women farmers themselves. Specially shortage of water to dry seasons is frequently mentioned constraint by the farmers. To address the issues female's dig water whale at their fragmented small land so that they can produce during dry seasons too. However respondents reported on difficulty to access water even after they dig 7 to 15 meters. Household labor is another issue that needed to be addressed. Due attention required to high work load women shouldered. Availability of technologies that save energy and time will create opportunity to the women to contribute to the family as well to the local and national economy.

High respect Development agents have by women is one of the most important opportunities that should be considered. Women benefited from home service by development agents rather than institutions found in woreda or zones.

Table 6-1 factors identified as concern by the farmers themselves

Concern	Recommendation			
Poor access to technologies	Introduction of technologies that address the reproductive and productive role of women			
	Technologies that save time and energy like drip irrigation.			
Shortage of water to dry season	Introduction of technologies that save water and increase labor efficiency, extension service			
Poor participation of women in credit skim	Planning and implementing programs and interventions that particularly focused on women, identifying women's need and aspiration from the production			
Absence of NGOs, research centers and others that work with women	Active involvement of NGOs; research centers and others that has gender targeted program			
Lack of negogating power on price of product sold. And poor bargaining power by FHH at low production	Facilitate access to market			
Shortage of land to cultivate	Increase women extension workers and local officials			
Luck of communal grazing land				
Shortage of labor in the house	Technologies that save energy and time			
Women's Shortage of time for productive activity	Awareness raising, setting example of societies like Awramba that brings equality on labor alocation			
Poor control on farm products	Awareness raising on sexual division of labor, asset distribution cultural attitudes and Practices that marginalized			
Poor access to training	Plan and implement trainings particularly to women			
Lack of opportunity to start her own business	Increase access to credit, provision of training on			
	business that women can do			
Law use of input	Provision of training, awareness raising campaigning			

## 6.3.1 Opportunities available in the locality

- 1. Access to extension personals. Frequent visit by development agents
- 2. Strong work ethics and high energy and passion women in the region
- 3. Opportunity to credit and saving from MFI,
- 4. Good management skill. Good knowledge regarding management of backyard
- 5. High demand of vegetables and fruits, chicken, small ruminants at market
- 6. Access to school to children
- 7. Access to health service. Including family planning service.
- 8. Low cost of schooling and health
- 9. Acceptance of women's production from backyard by the husband and other family members
- 10. Access to housing and house plot
- 11. High acceptance of extension workers, Das

#### Factors identified as constraints

- Cultivation relay on small fragmented land
- Shortage of water to dry season
- Shortage of labor in the household
- Poor access to technologies that save time and increase work efficiency. Cultivation relay on simple hand tools
- Poor access to micro credit, or poor participation
- Lack of gender specific programs
- Absence of non governmental organizations, research centers and others that work with women

- Poor negotiation power on price of product sold. Specially female headed households
   suffer from low share of harvest with the one who rented in for ox plowing
- Shortage of pasture and grazing land increase work burden on women to feed their cattle. This accompanied with shortage of household labor forced some women to sell their high yielding caws
- Women's Shortage of time for productive activity. High work load, multiple responsibility
- Poor access to farm inputs, Poor access to extension advise like training,

#### 6.4 Conclusion

The various factors that influence production are related to one another. Challenges to women are related to poor acknowledgment given to women and her potential in production activities . women shouldered multiple and high work load in the house but denied their access to income and decision

The traditional patriarchal society alienates women from major sources of income. Besides limited access to information and land, limited access to agricultural inputs and technologies severely constrains the productive ability of women in general.

The agricultural extension program follow family centered approach. There is no women farmers program. Female headed households are considered weak farmers and information regarding inputs as well as the actual inputs themselves are rarely distributed to them. Extension approach found to reject the importance women have in the food production process.

Culture is another barrier that contributed to reinforce structural barrier on women. Even the gap on the extension system is reflection of culture. Women ability to ox plow is not accepted

by the locality. men believe women would not be able to utilize input as effectively as male farmers. But significant number of women believes they can produce better than men if they get the appropriate support from extension system. Women in the study area give importance to extension programs on backyard cultivation of crops but backyard cultivation is considered as secondary activity of farmer or as means to rehabilitate of poor farmers by extension program.

In relation to backyard crop and cattle production land; household labor and water are the main factors that limited women's productivity with the limited resource they have. Access to income and credit also contribute to low production and utilization of the farm. The practice is characterized by limited investment;

## 7 ACCESS TO INPUT AND CREDIT

#### 7.1 Introduction

As shown on the previous discussions women lack the resources to use inputs like fertilizers, improved seeds, exotic breeds in their production system. Access to credit play big role in fulfilling this gap. In line with this MFI involved in provision of collateral credit to resource poor women, they design and implement special programs to target poor women in the region. Unlike efforts by MFI women's condition deterrent from time to time. Field data also reflects the same. This topic deals with the different strategies and techniques ACSI used and its contribution to women particularly married women. Data may found regarding FHH. However women in MHH are neglected both in the project and researches on pertained issue.

## 7.2 Access to input credit

ACSI provide credit to men and women farmers for input and others. ACSI also implemented special program called input voucher systme for input credit. The system is specially believed to benefit poor farmers through increasing access to credit and enhancing input use and adaption among smallholders.

Women in the region have access to credit from ACSI. It seem there is no structural barrier that limit women's access to MFI. However the FGD revealed the process one should pass to access credit didn't much with the current condition of women. Unlike the reports at ACSI which showed considerable increment in women's involvement in microcredit, the contribution of credit to economic empowerment and paradigm in decision making is negligible This showed availability of opportunity to credit by itself is not a solution. There are various institutional and structural issues that should be addressed.

Reports on access to credit is approximately 20%. Contrary to reports, access to credit is not approximately 20% but closer to 8% of total vouchers issued. Determining the amount of credit given should not include the down payment made to get access.

Table 7-1access to credit and cash voucher

	Cash Vouc	chers				Cre Vo	edit uchers	
Farmers	Farmers ('000's)	Amount of Income ('000's)	Voucher Avg. (Birr)	Farmers ('000's)	Amount of "Credit" ('000's)	Down Payment	Voucher Avg. (Birr)	Net Credit Voucher (Birr)
Male	1,446	2,129,159	1,473	319	451,093	253,078	1,414	620.7
Female	49	69,322	1,426	33	49,897	28,120	1,494	652.1
Female % Total	3.3%	3.2%	96.8%	9.5%	10.0%	10.0%	105.7%	104.6%
Total	1,494	2,198,481		352	500,990	281,198	1421.6	623.7

Credit Vouchers require a 25 - 50% down payment. This reduces the actual credit by half. Therefore, while approximately 20% of farmers are getting access to credit (352,000/1,846,000). The amount is half the typical cash voucher. In other words, the credit aspect of the voucher is only 623.7 Birr. The actual amount of credit is

500,990,000 - 281,198,000 = 219,792,000 Credit

(219,792,000)/(2,198,481,000 (Cash Voucher Money Collected)+500,990,000 (Credit Voucher Money authorized) = 8.1% Actual credit of amount distributed

1,629,592.5 Quintals of Fertilizer for Cash

578, 400 Quintals delivered for Credit

Because the down payment were not sex disaggregated the amount collected was assumed to be equally collected from both male and female farmers. So the projected figure showed

10% of participants are women. However data from field showed even it is smaller than the projected figure. If we take the case of Guzamen woreda only 0.4% of women take input credit and 1.7% take credit for fattening and other kinds

Significant number of farmers believe Credit is complicated and time-consuming, Cash is much easier. From the Farmer's Perspective: there are 12 steps to credit access involving several 6 groups (including group collateral formation. Whereas cash involves 3 steps and 2 groups. Field observation justifies 12 stapes for credit voucher can be shorten by using innovative solutions like using already formed groups like *mengistawi budin, debo; ekub; edir and others*. These are already formed groups among closed knight individuals

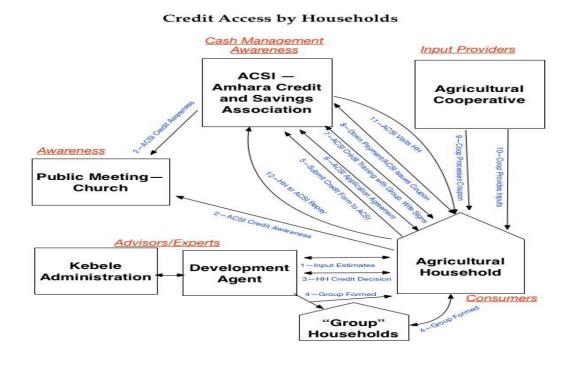


Figure 7-1 credit access by households

As shown on the previous topics, cash access by women is much lower than men's access. Suggesting the need for disproportionate emphasis on credit vouchers (ie. women need more

credit than men have!). on the contrary women's access to credit is 60% of men's access and input credit is low in high FHH concentrated areas.

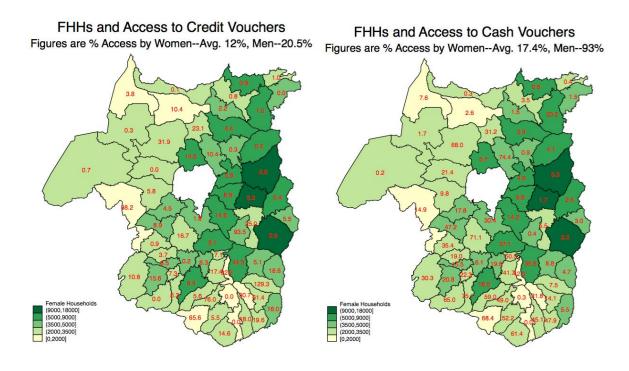


Figure 7-2 FHHs and access to credit and cash voucher

Despite widespread comments by several institutional representatives, that credit is going to "the poorest of the poor," on average farm households with the larger land size received credit. True for both MHH and FHH. Those that had not purchased vouchers had much smaller land size than those that purchased any form of voucher.

• Women (both female spouses and FHH) are far less likely to save than men in the MFIs. Savings for reasons of access to credit is small, particularly for women. 25% of men don't save but 43.4% of spouses, and 41.8% of FHH.

Questioned asked to find out the primary reasons for saving. Male heads say Earn interest and safety as the primary reasons for formal savings (77%), roughly the same as spouses (65%). Spouses are 3X more likely to not know ((15.7%) versus (4.6%)) their reason for saving than

men. Second best reason for saving is to prevent family from spending, access the money, which speaks to non-cooperative attitude in the family.

Table 7-2 reason to have formal saving

Savings	Best reason Husband	Second best reason Husband	Best reason Wife	Second best reason Wife	Best reason Female Head	Second best reason Female Head
1—Earn Interest	45.0%	14.1%	33.8%	17.2%	32.7%	15.8%
2—Neighbors have	1.0%	1.5%	3.0%	2.5%	2.6%	3.1%
3—Safety	32.3%	35.4%	30.8%	28.8%	32.7%	35.7%
4—Get Input Voucher	3.0%	8.1%	1.5%	5.6%	6.1%	3.6%
5—Prevent family	3.5%	24.2%	5.1%	19.2%	6.1%	15.3%
6—Gain Access loans	10.6%	10.1%	10.1%	8.6%	8.7%	7.7%
7—Don't Know	4.6%	6.6%	15.7%	18.2%	11.2%	18.9%
Observations	198	198	198	198	196	196

There is high Awareness of IVS by both sexes but spouses did not receive the formal training. Over 70% of respondents knew about IVS. However, with credit vouchers 77% of male heads and only 28.4% of spouses received training. This suggests men attend the meetings and women are not participating.

-Farmers like IVS. Rank it easier and weight faster and timelier access. Received more inputs is not as highly ranked (should be for credit). *Received More Inputs* is the third or fourth highest response for listed improvements. This showed its

Credit Voucher Access does not appear to give women discernibly more input into decision making. Men make the decisions, women do not make the decisions. Contrast to backyard plots on which women have higher decision making as discussed on chapter three

**Table 7-3Decision Making at the Intra Household Level** 

Decision by Husband/Wife	Decision Making for	Decision Making for	Cash	Credit Vouchers	Decision Making for
Trusband, write	Agr. Inputs	Vouchers	Vouchers	Vouchers	Backyard plot—
1—Wife's own decision	2.49	2.72	2.79	2.65	3.14
2—Husband's decision on wife	2.64	2.72	2.68	2.75	3.31
3—Wife's decision on husband	4.28	4.26	4.23	4.30	3.94
4—Men's own decision	4.28	4.24	4.25	4.24	3.82
2 to 1	Pos**	Pos	0	Pos	Pos**
4 to 3	0	Neg	Neg	Neg	Neg
3 to 1	Pos***	Pos***	Pos***	Pos***	Pos***
4 to 1	Pos***	Pos***	Pos***	Pos***	Pos***
% Husband Overestimate (2 to 1)	193%	112%	0	125%	330%
Observations	124	107	53	54	51

<sup>\*=90%</sup> Significance \*\*=95% Significance, \*\*\*=99% Significance,

# 7.3 . Net map

The net map interview aims at identify the stakeholders who work in the area of input use and adaption and understand how they link up as well as how they work with rural smallholders

One thing about Net-Map is that it the focus is at how things are actually done on the ground and not only what is written in formal documents. Actors do not have to be highly influential, but they do have to be "involved" in input use and adaption.

Table 7-4 Actors that influence Input use and adaption and how they linked

Advice giver	Region al govern ment	MFI (AC SI)	coop erativ es	Agricult ural Extensio n office	Local administr ators	Individu al farmers	Groups formed to take input	Key informants	Other develop ment partners NGOs,
Regional		3	3	3	2	1	2	1	1
government									
MFI (ACSI)			3	2	2	3	3	1	1
Cooperatives		1			2	2	1	2	1
Agriculture Extension office		1	2		1	3	2	1	1
Local administrators		2	1			3	1	1	1
Groups for input		1				3	3	1	
Key informants, informal groups						2	3		1
Other development actors		1	1			2	1		

Red shows No indication of the value of the advice to the recipient; very infrequent correspondence or not direct contact

Between the two

Green shows strong advice ... presence of frequent, direct contact, face-to-face meetings.

## The above figure shows

- various actors involved in input use and adaption and exert their influence on smallholders.
- The influence of actors on small holders is visible through direct contact or indirect means.

  However there is poor linkage among actors on input use and adaption
- The influence of **formal organizations** like MFI, cooperatives and local administrators is significant in input use and adaption. MFI provide the credit, cooperatives retailers of input

and local administrators as law enforcers at the time of recollect. The functioning and approach of these three has impact on input use and adaption by women.

Field data showed women have poor access to formal literacy the source of information for women in the region is usually informal means. They usually accept what elders or local respected persons told them. But in most woredas ACSI didn't do much to seek unanimous consent from key informants in the region.

- Field data also indicated key informants in the regions influence through provision of information; provide credit when farmers cannot abele to repay their depth at ACSI. They have more frequent and direct contact with multiple stakeholders than any others.
- In some wereda NGOs play positive role for input use and adaption
- Field observation justifies women are not open in the presence of men around them.
   Culturally women expected to be shy and submissive. So that gender issues like sex of workers, workers attitude, seating, place and time of meetings are important for women farmers input use and adaption. Setting and mixed sex meetings provide little opportunity to women to express their concern and may contribute to law participation of women in IVS
- Input use and adaption in the region is highly institutionalized. Specially government organization and those organizations that have close link with government influence organizing the locality; mobilizing resources and implementing programs. The influence of key informants, NGOs, local leaders and others on women's input use and adaption is not given proper attention by

#### 7.3.1 Level of influence

The next topic deals with the level of influence of each actor on input use and adaption. It gives information on haw influential is each actor and what are different ways someone could influence.

Table 7-5 Influence of actors on small holder farmers gendered input use and adaption after implementation of IVS

	Fundin g	formal supervision	Technical information	Advice	advocacy	Being highly knowledgable/re spected	Traditional authority	
Regional government	X			X	X	X		4
ACSI	X	X	X	X		X		5
Cooperatives			X	X			X	3
Das		X	X	X	X	X		5
Local governments		X		X		X		3
Informants	X			X	X		X	4
Groups formed for input			X	X	X	X		4
NGOs and GOs that work with women	X			X	X			3

The actors in input use and adaption interact at various level and shape the current input use and adaption.

The influence of organizations like ACSI, Agriculture Extension and local Administrators originate from their being legal bodies of government.

ACSI provide input credit to small holders. It also implements group system, joint registration, and credit and saving committee which evaluate credit worthiness of applicants. It also provide formal training and continuous follow up to its clients as a means of financial support and ascertain saving and repayment. However lack of **gendered programs**, **poor coordination and collaboration** with other actors limited input use and adaption by women. For example coordination between agriculture bureau and MFI create opportunity to women to have access to exotic and high yielding breeds of sheep and caw. Agriculture extension

bureau influence IVS through its technical expertise on input use. DAs and other staffs of extension gain high respect by the farmers for their knowledge and commitment. Generic public involved in input credit as members of credit committees, as enforcers of repayment and moral supporters. However, some informants found to play negative role through their bad mouth on input credit. This accompanied with poor access to formal training, exposed women to relay on informal information sources, which influence women farmers input use and adaption

Another factor that worth to discuss is the influence of NGOs, on input use and adaption. In areas where there is active involvement of NGOs like Achefer woreda in the development contribute positive influence on input use by women farmers. The influence of NGOs originates from their gendered programs. However their scope is limited to FHH and others that have small or no land to cultivation. In high producing areas like Adisn naGulit, Bachemo and others one can find NGOs hardly

Cooperatives are agricultural input retailers. With the introduction of IVS their influence in input use and adaption is decreases. And usually cooperative leaders are not happy on IVS for decreasing their influence on input price and distribution; law profit they get from input retail; which is 20 to 30 birr per quintal

#### 7.3.2 Discussion

Some actors like ACSI, Ag. Extension, cooperatives, groups are highly influential however others like informants, NGOs also involved in input use and adaption and exert their own pressure. These actors work together through various programs and interventions like group approach, credit and saving committees.

There is conflict of interest between ACSI and cooperatives. Cooperatives complain for low profit they get for their service (20 to 30 birr) from MFI. They also complain on MFI for manipulating the system to weaken cooperatives, which needs attention for its impact on the success of input adaption. Most leaders of cooperatives are those farmers that have acceptance in the locality. ACSI officials also complain cooperatives for their poor interest to collaborate, highly awkward and traditional work

After input is disseminate cooperatives used to share profit to its members. However after introduction of IVS cooperatives profit comes down. ACSI officials justify, cooperatives formed not to get profit from local farmers. So payment of 20 to 30 birr is enough for their service

From field I observed cooperative members Influential members of community, disseminate bad mouth on input use and adaption

There is low interest among farmers on Group approach for credit voucher because of its being time consuming and for damaging existing local support system. Women don't have time for group formation

Even if cooperatives and MFI are meant to support farmers effort. Most farmers don't take them as ally rather there is observed lack of "our" feelings by the locality to cooperatives and MFI. Some consider MFI as "mengist" (government), who has power on price determination, determine interest rate and use military force to recollect its loans, rather than their development allay.

There is lack of gendered program and intervention in input use and adaption by MFI. Or gender issue doesn't given approprat attention in all the process of access to input credit. Some of the issues that should be gendered include place and seating of local meetings, sex

of its employees, including women's idea and concern on interventions, identification of activities women need; control production and utilization and reserve some of its credits for this purpose

## 7.3.3 Striking points

- Its farmers with big land and livestock that participated and benefited more from IVS than poor farmers
- At some kebeles farmers suffer to repay their credit. Poor farmers are still dependant on local lenders to repay their credit from ACSI. Then they take more credit to repay for local lenders and have credit for their input
- The influence of informants on input use and adaption is significant to individuals decision which is not given proper attention.
- At some kebeles there is mix between input credit and regular credit system. Some farmers
  take credit in cash from MFI and use the money to pay for cash voucher for input( cash
  voucher is farmers should pay full money in advance, credit voucher farmers pay only 25 to
  50 % of required money in advance
- Credit women take .. they hand over the money to their husbands so that the husband control the use of the money. Women only shouldered the responsibility to repay
- Women, specially poorest of poor, prefer credit for backyard gardening, animal husbandry and poultry. However most credit is used to buy fertilizer and farming bull which is controlled by men in MHH.
- Cultural and structural barriers that women farmers face are not given proper attention in IVS

# 7.4 Conclusion

	Men	Women
Access to	Well informed about IVS, have	Women from MHH know about IVS, but low
information	formal training	access to training
Access	After organizing in group of 3 to 8 they	The women also organized in group of 3 to 8 for
to credit	get credit for input. And then collect	input. However their participation limited to go
	their input from cooperatives showing	and sign at ACSI bureau. IVS and other credits
	their voucher.	schems women have little or no decision making
		power
Decision on	Men make decision regarding use of	Low influence
credit	input	
Source of	At local meeting from ACSI officials,	From their husband, neighbors
info about	get formal training about credit,	Some WHH get formal training
IVS	interest rate and time to repayment	
Joint	Men still decide how to use the money	Joint registration contribute to women to
registration	Still men manage the use of the money	shouldered responsibility at the time of
and		repayment
Decision on		
credit		
Less	high interest rate, rules and regulations	poor access of credit for backyard cultivation,
interesting	only to protect the interest of MFI,	credit didn't linked with access to ram, ewe,
facts	repayment time contribute to low	chicken and others that women need.
	market price of fatten bulls and other	improved vegetables and access to market
	outputs	
		They want to start their own business, but most
		don't believe they can do it in the short future

## 8 CONCLUSION AND RECOMMENDATION

#### 8.1 conclusion

The objective of backyard cultivation to women related to satisfying triple role of women.

That is reproductive, productive and community management

Decision on backyard Woman decides what is to be planted, provides the labor, and she controls the production from the backyard garden. Most of the produce is used for household consumption but she may also sell this produce for cash. Women also tend to own and control production of small ruminants and poultry. However when we come to decision on utilization and investment on input at backyard, , women's influence come to shrink.

- Women control the production and use of back crop / livestock production. Backyard farming provide an opportunity to women to cultivate crop/livestock of their choice
- ➤ Women usually control sell of backyard products like vegetables, fruits as well as sell of small animals like sheep, chicken. However this is not absolute. Data indicate that that if there are limited production of crops and small number of these animals, women will maintain control over them. However, if the numbers increase, men will generally take over..
- ➤ Backyard products that generate high income are managed and controlled by men.

  Like timber, cash crops,
- The cultivation is dependent on men for its input. Even if women have better decision making on back plot the final decision on purchase and sell of livestock fatten at home; milking cows, fruits, trees and other inputs is generally controlled by men

- ➤ In the region it is common scenario that men control household income. Even income generated by the women's own labor. In the region women may sold backyard products, but usually men manage the income generated.
- > Such practice also observed on financial credit. After they took credit from micro finance institutions, women in the rural areas give the money to their husband so that he manage the utilization

The system create opportunity to empower women in all aspects, economical, social, psychological as well as cultural development

- It influences power relation in the family by decreasing dependency of women on her husband for her basic needs. The income generated used to fulfill her and her family need
- Create opportunity to women to channel their energy and time for productive work.
   Its closeness to home allows the women to produce crop/livestock of their choice without disturbing their role as wife and mother.
- Enhance decision making of women in the family.... Women generally have higher influence on back plot
- Increase social acceptance of women by her neighbors and other relatives. Increase the nutritive intake and health of women. Help to enhance women's self stem for her contribution in production activities

Low participation of women in input use is attribute to (as the women's' explain) lack of awareness, high work load women shouldered, risk avoiding behavior, poor access to extension service and technologies, poor control of women over income, existing power

relationship manifested in the family and in the society which favor men to control major decisions in the family; lack of gender sensitive programs and others

Most challenges to women are related to poor acknowledgment given to women and her potential in production activities.

women shouldered multiple and high work load in the house but denied their access to income; household resources and decision. Besides limited access to information and land, limited access to agricultural inputs and technologies severely constrains the productive ability of women in general.

Gender Survey analysis confirms that women are time and asset constrained. Female have a lack of time, labor, education, and other assets.

Unlike premises that family function as one, at the survey area there is separate income and ;saving for men and women; difference in productive objective; access and control to household assets

Many labor intensive agricultural activities require the active involvement of women alongside men. Women contribute about 35% labor requirement of crop farming. However women are considered as "helpers" on crop farming plot. Men dominated activities like ox plow, input use and marketing of product. Which are main components to power in the family.

Men focus on farming but women (including FHH and spouses) split their time between domestic work, food preparation, farming, community management and water and firewood collection.

Even if It's the women and girl children of the family that usually work on back plot on day to day base, there is growing awareness and involvement of men on the activity in recent years. The involvement of men on day to day activities is attributed to one of the following three reasons

- 2) Land less cultivation. Fattening, dairy.
- 3) If the cultivation involved technologies like irrigation; water pump
- 4) If market is not available in the locality and sell of product required travel to town every day

The agricultural extension program follow family centered approach. There is no women farmers program. Even if there is it focused on reproductive and community management role of women. Extension approach found to reject the importance women have in the food production process.

Culture is another barrier that contributed to reinforce structural barrier on women. Women ability to ox plow is not accepted in the locality. men believe women would not be able to utilize input as effectively as male farmers. But significant number of women believes they can produce better than men (both income and use) from their back plot and chicken and sheep kept at home if they get the right support from extension system. However gender neutral interventions usually end up creating additional burden to women.

Women in the study area give importance to extension programs on backyard cultivation of crops but backyard cultivation is considered as secondary activity of farmer or as means to rehabilitate of poor farmers by extension program rather than means to empower women

Enhancing access to credit and inputs are two important factors that play significant role to empowerment of resources poor women. To insure women's benefit from its saving and credit scheme, ACSI design and implement different techniques and strategies. However data from field shows women participation is by far lower than that of men. Its interventions criticized for not giving due attention to contemporary situation of women.

#### 8.2 Recommendation

- Reorganization to high work load and multiple responsibilities women shouldered
- Including women's idea believe, aspiration in any effort to empower women. Identify
  activities that women are prefer to involve in and create special programs and
  interventions
- Create opportunity to active involvement of women in the design and implementation of programs. Which include separate sex communication...
- Holistic approach Work in coordination and collaboration with multiple organizations to holistic solution
- Creative solutions that systematically increase women's involvement and minimize
  influence of riches and men. Care should be taken not to attract too much attention
  from the generic society.
- Awareness raising both men and women, through example seating, involving more
  women in the local authority and in the intervention. Promote social groups like
  Awramba that manage to create gender equality
- Equity not equality. Extra support to women so that they can function equally with men
- Introduction of technologies that decrease work load, time required and increase productivity. Specially water harvesting methods like drip irrigation,

Women spend considerable time and energy on fetching full wood and water. So that
its important to introduce technological products that increase labor efficiency and
decrease work load. For example drip irrigation, advanced and energy saving utensils
that save energy.

Table 8-1development constraints and gender challenges

Development constraints	Gender challenges	Requirements for successful extension interventions and productivity improvement			
Lack of water for dry season production.	Work burden of females is increased;	• Introduction of water conservation techniques			
	•Food insecurity and human sufferings increase and these have significant impacts on children and women.	that safe water and decrease			
	Limited production from backyard plots.	• Improve the utilization of the existing water resources (irrigation system);			
		• Introduction of short cycle variety crops.			
Lack of income and credit for input  Lack of income/credit means that females lack agricultural inputs	Women has less access to credit from IVS/ACSI. Even if there is opportunity, participation of women is limited by other social and cultural barriers	Introduction gender sensitive programs that particularly target women by credit associations  Aware raising of the locality			
and ploughing oxen	Major income including credit is controlled and dominated by men				
Access to credit	Women has access to credit from ACSI. But women from MHH give the money to their husband and the	Identifying Designing and implementing programs that particularly target women.			
	husband decided on the utilization on the credit	Strengthen the linkages and interaction			
		among different stakeholders for joint			
		actions and collaborations.			
		Awearness raising of men and			

Development constraints	Gender challenges	Requirements for successful extension interventions and productivity improvement
labor in the family for backyard cultivition	Women suffer from  Forced money to stop their production work, or limited their production to supplement home consumption only  Force WHH to rent their land and share production with the person	women on gender issue  Introduction of technologies that decrease work force requirement and save time.  Introduction of crop/livestock varieties that much with the condition of household.
land	Forced to extra cost to rent land Affects both males and females and leads to low yields and only limited possibilities for crop diversification Increase dependence of the family on the backyard crop/ livestock to satsfay its need for food which increases work load on the women	
access to input and technologies	labor intensive activity that use no/small technologies on production much time and labour is expanded for a small return.	Important to relies the contribution of women/home farming for the family sustenance by various stakeholders.  Look for ways to increase women's access and utilization of input
Gender neutral agricultural programs and interventions	Women's need, interest and constraints are not considered Women's productive role has given less attention	It is important to design and implement gender responsiveness programs.  Strengthen the linkages and interaction among different stakeholders for joint actions and collaborations.

Table 8-2Strategies used by ACSI, its strength and drawbacks

Strategy	Strength	drawbacks	Recommendation
group system	group collateral to provide loans, peer pressure to ascertain repayment and center meetings to disseminate information	Take time,  Most women don't have time to form group and attained group meeting	Important to use already existing groups  Seating at local meating for coffee, ekub, edir
Government involvement in its activities	got its seed capital from the regional governmental and other government backed institutions.  Work together for common mandate, poverty reduction	financial flexibility gets constrained and businesses activities suffer.  Refer is as MENGIST For which they should obey	
Joint registration	Legal point of view, better repayment rate	Bring no change on gender relation, didn't secure women's benefit in MHH give less chance to WHH	Creative solution that give priority to women's interest
credit and savings committees, which evaluate the creditworthiness of applicants and approve loans.	Involvement of the local community  Save expenditure, since most are volunteers	Evaluation criteria favored men than women Evaluation on "strong farmer"; having assets at home	1 1
Involvement of generic public as clients, as members of credit committees, as enforcers of repayments and as moral supporters	Better repayment rate, insure the use of credit for its target  Create access to women for saving and credit	Required gender professional on  Identification of gender issues and stratiges for beater women involvement	Required mobilization of the society  Identification of gender issues and stratiges for beater women involvement
Continuous fallow	Ascertain repayment, provide financial support,	Take the farmers time, develop felling of fear	Coordination with other offices like agriculture

Strategy	Strength	drawbacks	Recommendation			
up	insure saving and repayment,	feelings, the follow-up luck technical information and some come to fallow up found to misled farmers beyond their technical asperities,	office			
Involvement of local government	Increase repayment	Develop tention and influence development of our/ we feeling  Create Bad mouth which disseminate easily and influence women				

### Appendix 1

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# Appendix 2

# questioner

	Introduction:	ownership a asked about female in you participation questions yo	and the knowledge a t the households ge our household if app n is entirely voluntar	and use of input cred enerally, in additions to olicable. These quest ry. If you agree to par nswer. Your answers	a team carrying out a su it vouchers. The survey to sections which will be tions will take about 1.5 h rticipate, you can choose s will be completely confi	includes bot asked to a p nours to com to stop at a	h a sectior rimary adu plete and y ny time or	n to be It male and your skip					
	Please ask the participa	nts (male and fema	ale) if they consent to the p	particiaption in the study (chec	ck one box)								
		Participa	ant 1: Yes $\square$	No ∐	Participant 2: Yes	s L N	lo Ц						
	Information for househ	nold ID number			Access and Use of IV								
		Name		Code	Z12-Are you aware of th	e input voucher ("	MFI Coupon")	program?					
Z1	Zone				1=Yes 2=No 3=Not Sur	Э,	<u></u>						
<b>7</b> 2	Woreda				Z13- Did anyone in the h	nousehold purcha	se cash/credit	IV?					
<u>Z</u> 3	Kebele				Codes 1Cash Vouche	r 2-Credit Vouche	er 3-No						
<u>Z4</u>	Household				Z14 Who was primarily	reponsible for usi	ng the voucher	?					
					See Relationship code	es							
	Information on househ	old			<u> </u>								
<b>Z</b> 5	Type of household (1=Ma	ale and female adul	lt (Abura), 2=Female adult	only (Emura))	Sex codes	Questionnair	e processing						
<u>Z</u> 6	Name of head of househ	old			1 Male	Task	Date comple	ted					
<b>Z</b> 7	Name of respondent (if n	ot head)			2 Female		Day	Month	Name				
Z8	Sex of respondent		See codes		Relationship codes	Interview							
<b>Z</b> 9	Relationship to head (if r	not head)	See codes		1 Myself (head)	Field check							
<b>2</b> 10	Mobile phone number :				2 Spouse	Office check							
					3 Son/daughter	Data entry							
<u>7</u> 11	Abilty to be interviewed a	alone: (see code be	elow)		4 Son/daughter in law								
	Relationship codes				5 Grandchild								
	1-Alone 2-With adult fem	nales present 3-Wit	h adult males present		6 Parent or	Location of th	ne household						
	4-With adult mixed sex p	oresent 5-With child	dren 6-With adult mixed se	ex and children present	parent in law	GPS latitude	0		' "				
					7 Other	GPS longtitude	е •		1				

### Section A. Characteristics of members of the household

Ask if 14 yrs or older

					Ask these ques	What is the	Labor					
	ers, starting with the head of	How many months of the past 12 months has [name] lived with	been living with the household for	What is the relationship between [name] and the head of household?	Is [name] a male or female?	How old is [name]?	What is the highest grade that [name] has completed?	Can this	What is the main activity of [name]?	What is the second most important activity of [name]?	martial status of [name]?	contributed to farm and livestock work by [member]
	Name [Include anyone who a) lived there	household?	past ruays:	1 Head 2 Spouse	1 Male 2 Female	Years completed	0 None 1 Grade 1 2 Grade 2		1 Crop production 2 Livestock 3 Commerce		1 Single 2 Married 3 Separated	1 Full-time 2 Part time 3 Not work
	more than half the past 12 months, including those no longer living there and b) is currently living there on a permanent basis]	Months	1 Yes 2 No	3 Son/daughter 4 Son/daughter in law 5 Grandchild 6 Parent or parent in law 7 Other related 8 Other unrelated			8 Grade 8 9 Some sec. 10 Finish sec. 11 Post-sec. 12 Literacy cert. 13 Religious sch 14 Other	1 Yes 2 No	4 Other business 5 Employee 6 Student 7 Unpaid housework 8 Retired 9 Looking for work 10 Disabled or other 11 No 2nd activity		4 Divorced 5 Widowed	
PID	A1	A2	A2a	A3	A4	A5	A6	A7	A8	A9	A10	A11
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												1

Note: The household is defined as a group of people who live and eat together most of the time, that is more than 6 months of the year or more than 3.5 days of the week.

Note: The head of household is defined as the household member who makes most of the economic decisions. You may accept judgement of respondent.

### Section B. Housing and assets

			1							
What is the main material used for the	walls in your house?	B1	How many of the following items does y	our	What is the to	tal	Using the usual fo	orm of transportation	on, how long	
1 Brick or stone	6 Bamboo		household own?	Number	current value?	(Birr)	does it take to get	to [] in minutes?	Minutes	S
2 Concrete	6 Mud brick		improved charcoal/wood stove?			B8	the nearest dr	y season road?		B26
3 Corrugated metal	8 Wood and mud		radio			B9	the nearest al	-weather road?		B27
4 Wood	9 Other		televisions			B10	the nearest as	phalt/tar road?		B28
What is the main material used for the	floor in your house?	B2	land-line phone?			B11	the nearest ma	arket place?		B29
1 Tile/bricks	4 Earth or sand		mobile phone?			B12	the woreda an	ninistrative center?		B30
2 Concrete/stone/cement	5 Other						the nearest ag	cooperative?		B31
3 Cow dung or mud mixed with so	bil						the nearest ag	ro-input dealer?		B32
What is the main material used for the	roof on your house?	B3					the nearest fa	rmer training center	?	B33
1 Corrugated metal	4 Plastic sheeting						the nearest DA	A house?		B34
2 Mud/sand/stone, etc	5 Other						the nearest SA	CCO?		B35
3 Thatch/grass							a microfinanc	e institution?		B36
How many distinct rooms does the hou	sehold unit have	B4	How many of the following items does y	our	What is the to	tal	a bank?			B37
located in the same or different p	laces? (number)		household own?	Number	current value?	(Birr)	to obtain an ir	nput voucher?		B38
What is the main source of drinking wa	ater for your household?	B5	Axe	!		B13	[-99 = don't kn	ow]		
1 Piped water	5 Pond/Lake/Dam		Pick-axe	!		B14	Conversion ta	ble		
2 Protected well or spring	6 River		Sickle	!		B15	Hours	Minutes		
3 Open well	7 Rainwater		Plough			B16	1.0	60		
4 Open spring	8 Other		Yoke	!		B17	1.5	90		
What is the main type of toilet used by	your household?	B6	Hay fork			B18	2.0	120		
1 Ventilated/improved latrine	3 Bush or field		Shove			B19	2.5	150		
2 Traditional pit latrine	4 Other, specify		Hoe	!		B20	3.0	180		
What is the main type of lighting used	by your household?	B7	Winnower			B21	4.0	240		
1 Electric lights (main grid)	4 Oil lamps		Broad bed maker (BBM)			B22	5.0	300		
2 Electric lights (solar)	5 Candles		Small thresher			B23				
3 Electric lights (battery)	6 Other		Manual water pump			B24				
7 None			Planter			B25				

Section C. Agricultural land--Parcel

Page 3

								Ask on	ly if they managed	parcel				
Parcel num- ber	How large is this parcel of agricultura I land (include	parcel a back- yard	Does this parcel belong to your household?	[If C3=1] How did you obtain this parcel?		[If rented i How much paid for th	rent was	[If share- cropped	How did your household use this land in Meher 2006-07?	What is the main source of water for this parcel in Meher?	does it take you	What is the quality* of the soil in this parcel?	What is the color of the soil in this parcel?	What is the slope of this parcel?
	backyard# parcel)?	1. Yes 2. No	1. Yes (>> C5)	by family	1 Yes (>>C9) 2 No, we rent it	Value in birr	Time unit  1 Per month	harvest was paid?	Annual crops     Tree crops	1 Rain 2 Surface irrigation	this parcel?	parcer:	<ol> <li>Black</li> <li>Reddish Brown</li> <li>Brown</li> </ol>	1. Flat 2.Medium
	Area Convert to Hectares		2. No, we rent it from others (>>6) 3. No, we share-crop in (>>C7)	by govt 3 Purchased 4 Gift	to others (>>C7v)  3 No, we share- crop it out (>>C8)	[If in-kind, estimate		Percent	3. Livestock 4. Wood lots 5. Fallow	3 Groundwater  irrigation  4 Other / mixed	in minutes, by the	1 Poor 2 Average	4. Red 5. Grey / sandy 6. White	3.Steep
			4. No, we borrow at no cost (>>C8)	6 Other	4 No, we lend it at no cost (>>C11)	value]	year		7. Other	-77 Not applicable	usual mode of transport	3 Good	7. Yellow 8. Other	
C1	C2	C3	C4	C5	C6	C7v	C7u	C8	C9	C10	C11	C12	C13	C14
2														
3														
4														
5														
6														
7														
8														
9														
10														
12														
13														

#-Define Backyard parcel here. \* "Poor" means low yield in a normal rainfall year because sandy, rocky, or weed-infested. "Medium" means average yield with normal rainfall. "Good" means good yield with normal rainfall because soil is dark, soft-textured, and weed-free.

#### Crop codes

#### Cereals Vegetables White teff 10 Cabbage Black/mixed teff 11 42 Tomatoes 12 43 Green peppers Barley 13 Wheat 44 Chili peppers 14 49 Other vegetables Maize grain Maize cob Root crops 16 Sorghum 51 Onion 17 52 Potato Finger millet 18 Garlic 19 Wasira (wheat/barley) 54 Taro/godere 20 Other grains 55 Sweet potato Pulses 59 Other root crops 21 Faba/horse bean Permanent crops 22 Field peas 61 Avocado Haricot beans 62 Banana 24 Chick-peas 63 Mango Orange 25 Lentils 26 Grass peas/vetch 65 Papaya Other pulses 69 Other fruit Oilseeds 71 Chat 30 Abishe 72 Coffee 31 73 Neug Hops 32 Linseed 74 Enset 33 75 Sugarcane Sesame Other pulses Beles (cactus) Other permanent

### Quantity unit codes

Other land use

82

83

85 Other

Fallow

Pasture/grazing

Planted trees

Natural trees

1	Kilogram
2	Quintal
3	Small madaberia
4	Big madaberia
5	Piece/esir
6	Cup
7	Liter
8	Dozen
9	Crate
10	
11	
12	
13	
14	
14	Other

Section D. Crop production

Enumerator: For each plot from Section C, ask which crops were grown by the household on each plot in each season, then ask D4 to D8. This table is at the plot-season level.

Parcel Protumber Manumber Number Namber Season (COV) (	Enumera				which crops were				then ask D4 to D8. This				
Meher Season 2007 (EC) or 2014 (GC)— Copy from Section C 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Parcel	Parcel	Plot number	What crop	What was the	Which family	Was the	How much [crop]	was harvested from this	How was the yield	[If	Was this plot	How was this
Season 2007 (EC) or 2014 (GC)—Copy from Section C1 C1 C2 C2 Page   Page   C1 Price   C2 Price   C3 Price   C3 Price   C3 Price   C4 Price   C3 Price   C4 Price   C5	Number	size	[number within	was planted	area planted with	member had main	primary	plot during this s	season Meher 2007?	in Meher 2007	D7=1,2,4,5]	?	plot prepared?
2007 (EC) or 2014 (GC)- Copy (From Section C1 C2 C3 page] Season? Season. Season? Season. Seas	Meher		parcel]	on this plot	[crop] on this	responsibility for	expected use			compared with a	What is the		
(EC) or 2014 (GC)—Copy from Section C2 C1 C2 C3 C4 C5 C5 C5 C7 C5 C7	Season			in the Meher	plot during this	farming this plot?	output of crop?			normal year?	main reason		
2014   GC)- Copy from Section C2   Section Section C2   Section Section C3   Section C4   Section C4   Section C5   Section C4   Section C5   Section C6   Section C6   Section C6   Section C7   Sectio	2007			season?	season?						for this		
(GC)—Copy from Section C1 C1 C2 C2 C3 C4 C5	(EC) or										change in		
Copy from Section C2 In plot]  C1 C2 From Section C2 In plot]  C2 From Section C3 From Section C4 In plot]  C3 From Section C4 In plot]  C4 From Section C5 In plot]  C5 From Section C6 In plot]  C6 From Section C7 In plot]  C7 From Section C7 In plot]  C8 From Section Aor	2014										yield?		
from Section C2 willtigle crops in plot] back of previous page] back					Area	Use PID code from	1. Food Crop	Quantity	Quantity unit	1 Much higher	1. Rainfall	1 Inter-	1 Hoe
Section C1					(in hectares)	Section A or	2. Cash Crop		1 Kilogram	2 A little higher	2. Fertilizer us	cropped	2 Animal plow
4. Utner (specify)  4 Big madaberia (100 kg 5 Much lower 5. Soil degrads ame crop 5 Mixed 5 Piece/esir 6 Don't know 6. Pests or dis 4 None of 7. Other above						81 Joint males	3. Seed		2 Quintal	3 Roughly the same	3. Seed use	2 Sequential	3 Animal BBM
5 Piece/esir 6 Don't know 6. Pests or dis 4 None of 7. Other above	C1			page]		82 Joint females	4. Other		3 Small madaberia (50 kg	4 A little lower	4. Other chemi	3 Replanting	4 Tractor
7. Other above						83 Joint mixed	(specify)		4 Big madaberia (100 kg	5 Much lower	5. Soil degrada	sume crop	
									5 Piece/esir	6 Don't know	6. Pests or dis	4 None of	6 Other
D1         D2a         D2b         D3         D4         D5         D6         D7q         D7u         D8         D9         D10         D11											7. Other	above	
	D1	D2a	D2b	D3	D4	D5	D6	D7q	D7u	D8	D9	D10	D11

#### Section E1. Crop inputs (costs)

Enumerator: Write each parcel, plot, and crop code from D2 and D3, then complete E4 to E9 for each cultivated plot.

Parcel number	Plot Number	Crop Code	Seed Use	For	the [crop] gro	own in this plot, h	ow much [input t	type] did this ho	ousehold use	on this plot du	uring this seas	on?
Copy parcel numbers from	Copy plot size from	codes	seed saved from the previous harvest	seed obtained for free or in barter	seed that v	vas purchased	urea	DAP	NPS	Organic Fertilizer	pesticides, herbicides, & spraying services	tractor hire & other non- labor expenses
D1	D2b	from D3	Quantity in Kg	Quantity in Kg	Quantity in Kg	Value in Birr	Quantity in Kg	Quantity in Kg	Quantity in Kg	Value in Birr	Value in Birr	Value in Birr
		E3										
E1	E2	E3	E4	E5	E6q	E6v	E7a	E7b	E7c	E7v	E8	E9
		-									<del>                                     </del>	

### Section E2. Crop inputs (labor)

Parcel number	Plot number	Crop codes	Ir	In growing the [crop] on this plot, please identify how many total male and female workdays where used for each identified activity?												
Copy parcel numbers	numbers	Copy crop	Land pre	eparation	Pla	nting	Wee	eding		ng chemical ertilizer		manure &	Pest	control	Harvest & p	ost-harvest
from E1	from E2	E3	Male	Female	Male	Female	Male	Female	le Male Female Male Female		Female	Male	Female	Male	Female	
E10	E11	E12	E13m	E13f	E14m	E14f	E14m	E14f	E15m	E15f	E16m	E16f	E17m	E17f	E18m	E18f

### Section E4. Crop inputs (seed)

Enumerator: Ask about the crops grown (E51) first or complete using Section D, then fill in the rest of the row for each crop grown.

				Ask these questions only if E51 = yes											
Crop		Did your	How many	In 2006-07		Ask these o	questions only	if E53=2 or	3 (the house	old used seed not	from own harvest)				
Code		household	years ago was	(2014), did		How did you pay	How many		,		Did you have any	What are the	two most		
		grow [crop]	the last time	your	obtain the seed that	for this seed?	minutes does		ns with this	name of the main		important ch			
		in Meher 2006-07	you purchased seed for this	household use seed	was not from your		it take to get	supplier?	(List top two)	variety of seed?	variety?	seed of this c	rop should		
		(2014)?	crop?	saved from	harvest?		to this supplier					have?			
		(2021).	crop.	your harvest			using normal				1 No problems	1 Grain yield			
				or seed from			transport?				2 Needs inputs	2 Grain size			
				another			· ·				3 Low price	3 Disease/pe	st resistance		
				source?	1 Farmer						4 Poor taste				
			1 = last year		2 Grain trader			1 No prob	lem		5 Poor feed	4 Drought res	istance		
			2 = 2 yrs ago		3 Input dealer	1 Free		2 Delivere	d late	[write out	6 Too costly	5 Flood resis	tance		
			3 = 3 yrs ago		4 Cooperative	2 Cash	[Use -77 if	3 Mixed w	ith other	name of	7 Can't save	6 Low labor n	ieeds		
			etc.		5 Bureau of Agric.	3 Credit	E54 = multiple	4 Poor germination		variety, write	8 Vulnerable	7 Low input n	eeds		
					6 NGO	4 In kind	source]	5 Other qu	ality prob	-99 if	to drought	8 Ease of pro	cessg		
			88=Never	1 Saved	7 Research inst.	5 Mixed		6 Too expensive		no name	9 to flooding	9 Market den	nand		
				2 Other	8 Seed company			7 Poor packaging		known]	10 Poor straw	10 Good tast	e		
		1 Yes		3 Both	9 Multiple source			8 Incorrect label		8 Incorrect label			11 Shelf life	11 Good colo	r
		2 No	(years)		10 Other		(minutes)	9 Other		9 Other			12 Other	12 Fodder qu	ality
E19	E20	E21	E22	E23	E24	E25	E26	E27	E28	E29	E30	E31	E32		
10	White teff														
11	Black/mixed teff														
12	Barley														
13	Wheat														
14	Maize														
15	Sorghum														
17	Finger millet														
21	Faba/horse beans														
22	Field peas														
23	Haricot beans														
24	Chick-peas				-										
25	Lentils														

Section	E3 Cror	innute (fr	ortilizor an	d info) & Exte	onsion So	vices								
E33 In Me	her 2007 (20	014-2015), did on your crops	your househol		ension sei	E44 [If E	E33=yes] How ma e to get the quant 		lin	o the place of		ove you met with a deve Yes 2 No [if no, >> E2:	elopment agent (DA) within	n the past 12 months?
fertili	3=yes] What zer on your o increase cro	rops?	eason your hou	sehold used chemi	ical	che	E33=no] What are mical fertilizer in tilizer too expens	Meher 2006-0		2 No		as the DA male or for Male 2. Female 3.	emale? Both a female DA and	a male DA
		ion agent reco			·		tilizer supplier to		1 Yes		E50	During your most red DA, to whom did	I the DA give	
		e access to con	operative servi	ces			ps do not need fe		1 Yes		i	nformation advice?	(Use Member ID)	
	her (specify)		CI JCI VICCS				ed organic fertiliz n't trust quality o		1 Yes	2 No	E51	What type of extens	sion activities did you p	articipate in mostly
	E33=yes] Who did you receive the fertilizer from?						tilizer not availal nimum amount w		1 Yes 1 Yes					
1 Coope	Cooperative 4 NGO or project Friend or neighbor 5 Other					i Oth	ner, specify:					and disease contr	eals 2-New varities of	nagement 5-Crop
	ader or input dealer					E46	at are your main	courses of infi	ormation on			Input markets a organization 11-live	g 7-Irrigation 8-Output nd prices 10Collectiv stock production 12-fa	e Action/farmer mily health 13-tree
							p production met			•	'	planting 14-"b	ackyard gardens" 15-	Other
you n	E33=yes] Was the fertilizer available at the time u needed for the meher season? 1 Yes 2 No					E47 What are your main sources of information on E52 crop markets and prices? (up to two) What type of extension activiti								
	E33=yes] Were you able to buy as much fertilizer you eded and could pay for? 1 Yes 2 No						at are your main weather forecast				'	rom DA training? L	ist up to three activities	s. Use Code above.
			ıy as little ferti sharing 3 No	lizer as		1 Newspapers 2 Radio								
E40 [If E33		you able to bu	uy the type of fe			3 Tele	evision X signboard							
			or the fertilizer	-		6 Res	ension service/Da earch stations	A						
on cre	edit?	1 Cash	2 On credit 3	Both			pperative staff ends and neighbo	ırs						
		•	Quantities t the crop I	s evel, not plot	level, for e	each sea	ason.				Ask	these questions	s only if some sale:	s of this crop
Parcel number	Parcel	What	How much [d	crop] was	How much of harvest was	of the	How much was or will be	How much was saved	How much of this	How much was or will	What price did you	Where was the main place where	Who was the main buyer of [crop]?	Did the buyer
number	Size crops were harvested during each grown season of 2006-07? used				used for consumption		used for animal feed?	for seed?	harvest was or will be sold?	be used for gifts, barter, & other?	receive when selling this crop?	it was sold?	buyer or [crop]?	contract you to grow [crop]?
Сору	ppy Copy [Use crop Quantity Unit				Quan	tity	Quantity	Quantity	Quantity	Quantity	Birr per	1 On farm or home	1 Farmer/consumer	
Parcel Number	Parcel size from	Parcel codes from ize from Section D3				-					kilogram	2 Local market	2 Trader	1. Yes, pre-planting
from D1	D2b		[Use quantities	2 Quintal 3 Small madab		C	Quantities in sa	me unit as in	F4q	 I		3 Roadside	3 Processor	2 Vos. pro harman
			from D6q in Section D	3 Small madaben 4 Big madaben								<ol> <li>kebele trade cer</li> <li>district trade cer</li> </ol>		2. Yes, pre-harvest 3. No
			Section D	5 Piece/esir									7 Other	
F1	F2	F3	F4q	F4u	F5		F6	F7	F8	F9	F10	6. Other F11	F12	F13

		grown during 2006-07 (EC)?	season of 20	006-07?	used for consumption?	used for animal feed?	for seed?	or will be sold?	gifts,	receive when selling this crop?	it was sold?		[crop]?
Copy	Copy Parcel	[Use crop codes from	Quantity	Unit	Quantity	Quantity	Quantity	Quantity	Quantity	Birr per		1 Farmer/consumer	
Number	size from	Section D3		1 Kilogram				ļ	ļ			2 Trader	1. Yes, pre-planting
from D1	D2b			2 Quintal		Quantities in sa	me unit as in I	F4q	1			3 Processor	
			from D6q in	3 Small madab							4 kebele trade cer		2. Yes, pre-harvest
			Section D	4 Big madaberia	a I						<ol><li>district trade cer</li></ol>		3. No
				5 Piece/esir							6. Other	7 Other	
F1	F2	F3	F4q	F4u	F5	F6	F7	F8	F9	F10	F11	F12	F13

This table is at plot level. Verify that the total harvest (F4q) equal to the sum of different uses (F5+F6+F7+F8+F9).

Section G. Fiscal Literacy and IVS Awareness			
In the past 12 MONTHS, have you personally, saved or set aside			
any money for the following reasons?	G1	6. Did you receive IV training? 1=Yes 2=No	G6
To start, operate, or grow a business or farm activity			
2. For old age		7.If yes, who provided the training?	G7
3. For education or school fees		1=MFI officer, 2=DA, 3=Other Government Official	
4. To get access to credit			
5. Other (specify)		8. If Yes, how useful was the training?	G8
		1= very useful, 2=somewhat useful, 3=neutral, 4= somewhat unuseful 5=very unuseful	
Imagine that you have an emergency and you need to pay 500	G2		
Birr. How possible is it that you could come up with 500 Birr within the NEXT MONTH?		Before the introduction of the input voucher, how did you usually obtain inputs?	G9
WIGHT GIE NEXT MONTH:		1=Cooperative, 2=Private Sellers, 3=Other Farmers, 4=Did not buy inputs before	
Very possible 2. Somewhat possible 3. Not Very Possible 4.			
Not all all possible 5.Don't know		10. Contrasting to previous method of purchasing of inputs, how does IV compare?	G10
		1=Very difficult, 2=Difficult, 3= Same, 4=Easier , 5= Much easier	
Could you come up with 250 Birr within the NEXT MONTH?	G3		
		12. Did the IVS help to increase the amount of input you usually use? 1= yes, 2=No	G12
From the list given below, what are the two	G4a		
best reasons to save Birr in a formal	G4b	13. Identify the two best improvements of IVS over previous input access?	G13
savings account (Bank, MFI, SACCO) rather than at home?		1=Faster access, 2=More timely access, 3=Received more inputs, 4=Easier payment system	G13
Earn interest 2. Because neighbors have accounts 3. Safety		5=Received higher quality inputs, 6=no improvement	
4. To get input voucher 5. To prevent other family members			
from spending 6. To gain access to loans 6. Don't Know			
		14. Identify the two biggest challenges of IVS over previous input access?	G14
		1=Slower access, 2=Less timely access, 3=Received less inputs, 4=More difficult payment	G14l
From the list given below, what are the two best reasons to make a loan payment on	G5a	system 5=Received lower quality inputs, 6=no challenges	
time?	G5b		
		15. Overall, do you prefer the current IVS system or the previous method of aquiring Inputs?	G15
		1=Strongly prefer IV system 2=Somewhat prefer IV system 3=No difference 4=Somewhat	
Avoid penalties (increased Birr payment)		prefer previous input system 5=Strongly prefer previous input system	
Maintain good relationship with lender for future loans			
3. Don't need to pay on time, just need to			
4. Not important, government will assist with payment			
5. Don't Know			

#### Section H. Livestock income

Animal type	Code	In the past		_			If	H2 = "Yes", con	nplete H3 to H1	1				
			Which family	How many	How many	Over the past	Over the	Over the past		Over the past 12			Over the past	Over the past
		have	member had main		[animal	,				much have you ea			12 months,	12 months,
			responsibility for	does your	type] did	how many of				the following act	ivities?		how much	how much have
		your household	taking care of the	household	your	your [animal		,	the sale of				have you	you spent on
		raised or	[animal type]?	currently	household	type] have		type] have	each of these			spent on		other costs for
		produced		own?	own at this	been	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	you sold?	animals (or				for [animal	[animal type]
		any of the			time last vear?	slaughtered to be	you bought?		carcasses)?			[animal type]?	type]?	such as veterinary
		following			year :	consumed by						typej:		supplies, taxes,
		animals?				the								and hired
			Use PID codes			household?								labor?
			in Section A or											
			81 Joint males											
		1. Yes	82 Joint females											
		2. No	83 Joint mixed	Number	Number	Number	Number	Number	Birr/animal	Activity	Birr/year	Birr/year	Birr/year	Birr/year
	H1	H2	H3	H4a	H4b	H5	H5a	H6	H7		Н8	Н9	H10	H11
Ox / bull	81									Rental				
Cows / calves	82									Dairy products				
Horse/donkey/mule	83									Rental				
Camel	84									Goat milk				
Goats	85									Wool				
Sheep	86									Egg sales				
Pigs	90									other by- products				
Chickens	87									Honey sales				
Other livestock	88									Dung cakes				
Honey bees	89			*	*					Cow rental				

Section I. Other income					
Other income activity	Code	In the past 12	,	Ask for each activity for w	hich I2=yes
		months, have members of your household received income from [activity]?	Which member of the family is responsible for managing this activity?		For each of these months that you were involved in [activity], how much income did you take home to your family in EACH
			Use PID codes from Section A or		
			81 Joint males		
			82 Joint females	[range 1 - 12]	
		1. Yes 2. No	83 Joint mixed	Months/year	Birr/month
	Activity	12	13	14	15
Firewood gathering	101				
Charcoal trading	102				
Agricultural trading	103				
Other trading	104				
Grain milling	105				
Food processing business	106				
Local drink (tella, tej, araqi, etc)	107				
Repair business	108				
Other business	109				
Agricultural wages	110				
Non-agricultural wages	111				
Pension	112				
Remittances from family in same region	114				
Remittances from family in other regions	115				
Remittances from family in other countries	116				
Other transfers received (e.g. iddir)	117				
Productive Safety Net Programme	118				
Other assisance programs	119				
Other	120				

Note: "Other" could include non-agricultural land rental income, interest income, or property rental income. Do not include agricultural land rental.

### Section J. Savings

Does anyone in the household participate in formal or informal savings groups?

1. Yes 2. No K1 [If "No", skip to K11]

[For each cash loan requested or applied for, fill in one line below, whether or not they received the loan]

number (lis up to 4 of the oldest adults	household currently a	does the iqub	does each member contribute at each meeting?		[If yes] How often does the idir meet?	member contribute	Do you have an account at a SACCO, bank, microfinance institutions, or other financial institutions?	[If yes] Which ones?		Vhy not? op two sons
including both spouses, if they exist)	1. Yes 2. No	(every x days)		1 .Yes 2 . No	(every x days)	(Birr)	2. No	1. Sacco 2. Bank 3. MFI 4. Two of above 5. All three 6. Other (specify)	See Code	See Code
J1	J2	J3	J4	J5	J6	J7	J8	J9	J10a	J10b

<sup>1.</sup> I don't know where they are. 2. They are too far away from my home. 3. It is too complicated to open an account. 4. They require a minimum balance. 5. I don't trust them with my money. 6. I don't see any advantage to having an account. 7. Other (specify).

#### Section K. Credit

During the past 12 months, did anyone in this household apply for credit or ask for a 1. Yes 2. No K1 [If "No", skip to K12] loan of at least 100 birr?

 $[For each cash \, loan \, requested \, or \, applied \, for, \, fill \, in \, one \, line \, below, \, whether \, or \, not \, they \, received \, the \, loan]$ 

	Who did you ask for a loan or credit?	Did the household	.,	What was the amount borrowed	How long was the loan		What was the main way the money was used?	Which member was responsible	Were you able to repay the loan?
c nor.	or create:	receive a loan?	for being decimed:	?	101 :	loan?	the money was asea:	for the loan?	терау инстоат:
	Relatives     Friends     Money lender/Arata     Cooperative     Bank     Saving & Credit Assoc.     I qub     MFI/ICV     Others	1 Yes 2 No	1 Inadequate collateral 2 Had outstanding loan 3 Past history of default 4 Bad credit history 5 Interest rate too high 6 Lenders not nearby 7 Procedures too cumbersome 8 Other, Specify	Birr	Months	(convert to per month)	6 Education	Use PID code from 81 Joint males 82 Joint females 83 Joint mixed	1 Yes, all 2 Only part 3 Not at all 4 Not yet due
K2	K3	K4	K5	K6	K7	K8	К9	K10	K11
1						%			
2						%			
3						%			

During the past 12 months, did you receive any crop inputs or ag. equipment on credit? 1. Yes 2. No K12 [If "No", skip to Section L]

					If K13 = "yes", comple	ete K14 through K20			
	Did you obtain [input type] o past 12 months?	n credit in the		What was the value of these inputs?	What crop was the input used on?	How much time is the credit for?	Who applied for the credit?	Was the repayment in cash or in kind?	,
		1 Yes 2 No	1 Input supplier 2 Trader 3 Processor 4 Cooperative 5 MFI 6 Min of Agric. 7 NGO 8 Other	Birr	Use product codes	Months	1 Self 2 Spouse 3 Self and spouse 4 Other Household Member 5-Self and other household member/s 6-Spouse and other family member/s	3 Both in cash	1 Yes, all 2 Only part 3 None of it 4 Not yet due
K12	K13	K14	K15	K16	K17a   K17b   K17c	K18	K19	K20	K21
1	Seed				I I				
2	Fertilizer								
3	Other input				1 1				

estion I	Household decision r	nakina arauna	d neadmation	and Income go	norotion				
Dection L.	nouseriola decision i	naking around	production	and income ger	ilei ation				
Activity Code		Did you (individual) participate in [Activity] in the past Meher season/past year?	How much input did you have in making decisions about [Activity]?	If you have a spouse, how much input does he/she have in making decisions about [Activity]?	Do you rely on another friend/family (not your spouse) in making decisions about [Activity]?	How much input did you have in decisions on the use of income generated from [activity]	If you have a spouse, how much input does he/she have in decisions on the use of income generated from [activity]	Do you rely on another friend/family (not your spouse) in making decisions on the use of income generated from [Activity]?	
		1=Yes 2=No	(See code below)	(See code below)		(See code below)	(See code below)	(See code below)	
		If 2 skip L4 - L9							
L1	L2	L3	L4	L5	L6	L7	L8	L9	
	Getting inputs for agricultural production								
	The type of Crops to grow for agricultural production								
3	Input Vocucher								
4	Backyard Plot								
	Food Crop Farming: crops that are grown primarily for household consumption.								
	Cash Crop Farming: crops that are grown primarily for sale in the market								
7	Taking crops to market								
	Large Livestock Raising: (oxen, cattle)								
9	Small Livestock Raising: (chickens)								
	Wage and salary employment: in-kind or monetary work								
11	Farm Equipment (non- mechanized)								
12	Small Consumer Durables (radio, cookware)								
	Large Consumer Durables (fridge, TV, sofa)								
14	Use of mobile phone	_							
de: 1=No Inp	ut 2=Input into very few decisi	ions 3=Input into so	me decisions 4=I	put into Most Decisio	ons 5= Input into All o	lecisions 6=No decision n	nade		

						Morr	ning												Da	ay									Ni	ght		
Activ	ivity	11		12		1		2		3		4		5		6		7	8		9	10		11	12		1		2		3	
A Primary/Mai Activity Code																																
Secondary a B (Use activity does not exi	ly Code- if																															
8=shopping	g/gettin	g sei	rvice	s 9='	Wea	ving,	sew	ing,	texti	ile 10	)=Fo	drinking 3=Personal Care 4=School (also homework) 5=Wage work 6=Own business work 7=Farming 1=Food Preparation/Cooking 11=Domestic work/cleaning 12=Gathering Fuelwood/fetching water 13=Care V/movies/listening to radio 16=Sitting with family 17=Hobbies sports/excercising/reading 18=Religious																				
M2Was yester	rday a holio	day o	r non	worki	ng da	y?	Yes			No	stilities 10-Community logist 20-Other																					
M3-Were you u	unable to co	ompe	te no	rmal	activit	ies in	the la	st 24	hours	s?		Yes			No													1 to 1	.0			
M4-How satisfied are you with your avaialable time for leisure activities like visiting neighbors, watching TV, listening to the radio, seeing movies or doing sports?																																

Section	n N. Group Membership				
Group Code	Group Categories	Is there a [group] in your community?	Are you an active member of this [Group]?	If not a member, would you like to be a member of this group?	If N5=1, why are you not a member at this time?
		1=Yes 2=No	1=Yes 2=No	1=Yes 2=No	(See Code NA)
N1	N2	N3	N4	N5	N6
1	Agricultural/livestock/fisheries producer's group (including marketing groups)				
2	Water User's Group				
3	Forest User's Group				
4	Credit of microfinance group (including SACCOs/merry-go- rounds/VSLAs)				
5	Mutual help or insurance group (including burial group)				
6	Trade and business association				
7	Civic Groups (improving community) or charitiable group (helping others)				
8	Local government				
9	Religious Group				
10	Other women's group (only if it does not fit into one of the other categories)				
11	Other (Specify)				
12	Non-food consumption needs (health/education/travel/tax)				

## Appendix 3

## **Focused Group discussion checklist**

The role of backyard farming for socio economic empowerment of women

Checklist for FGDs with men and women farmers involved in backyard cultivation of crops

in

and cattle production
Demographic characteristic (use register to capture all participants 'demographic characters)
Name of participant
1. What are major crop livestock species grown in garo in the village And animals kept a home
2. What are the farming activities that you involved is there difference between men and women
3. What are the benefits of home farm in the local community
4. Is there any technology that particularly used in garoif so do you benifited well out of it
5. How different and similar is backyard farming with other farming activities
6. Mention organizations that support your work in relation to agriculture How they support
7. Is there difference between men and women in choice of crop and livestock for backyard. Discuss
8. What are main factors that influence your productivity from backyard plot? How you deal with it
9. Do men and women gat equal GOs and NGOs support( such as technical advisory, credit, access to improved seeds, information, legal service for any reason ask why.)
10. Mention different associations you involved inlocal institutions, organized by GOs,
organized by NGOs as all one by one. edir, equb, mahiber, mengistawi budin, other
associations
11. What are constraints to your production?

- 12. Do you sell your product? Where do you sell? Who sold it?
- 13. For what do you use the income?
- 14. What should be done to enhance your benefit from backyard farm?
- 15. Discuss on Information on IVS
  - I. Do farmers (both women and men) get a formal training? If yes, who provide such trainings and what was the training approach? Are there any training that relate to backyard cultivation?
  - II. Access to financial services: For what do you use the credit?. What makes the IVS attractive to both women and men farmers? What makes it less attractive? What should be done to enhance its benefit?
  - III. *Input distribution, adoption, and use:* Does the IVS increase farmers input adoption and use? Did it increase differently for both women and men? Did the joint registration requirement improve use for women? If yes, how?
  - IV. Voucher reconciliation and loan repayment: how is the voucher reconciliation done? Are there challenges on voucher reconciliation? What sources do you use to pay your loan

### Appendix 4

### Need assessment questioner

The following questions are aimed to find out if there is difference in need and want between men and women ....the questions help to find out the strength and concerns of both sexes

first through focused group discussion various needs and concerns of a community are identified including information gathered from secondary sources and direct observation the following questions are asked to find out gender disaggregated data

**Instructions:** I am going to read some

statements to you. I would like you to tell me two things about the statement: how important it is to you that the following services are in your community, and how satisfied you are with each service in the locality  Choose the appropriate score using the following scale	How important is this to you 1=completely unimportant 2=unimportant 3. mportant 4=very important	How satisfied are you with 1=completely unsatisfied 2=unsatisfied 3=satisfied 4=very satisfied
1. Availability of NGOs in the locality that work with women and children		

2 Availability of Agricultural Extension Corvins	
<ul><li>2. Availability of Agricultural Extension Service</li><li>3. Frequent visiting by the DA</li></ul>	
4. availability of technologies that used in the backyard	
5. affordability of such technologies	
6. Access to financial institutions like credit associations, banks,	
7. Time and interest rate of credit available	
8. Quality services by such financial institutions	
9. Access to irrigation and other water collecting methods	
10. Access to market	
11. Price of harvest	
12. availability of communal grazing land	
13. availability of exotic and high yielding breeds	
14. availability of technologies that help to increase production and	
reduce labor requirement	
15. access to concentrates and improved varieties of feed	
16. Availability of self help groups	1
17. Availability of information regarding market, feed, production	
system others	
18. Availability of associations like edir, equb, mahber	
19. Sex and age of extension workers who communicate you	
20. Availability of land for keeping cattle, store feed,	
21. Availability land for forage development and grazing	
22. Assess to clean water	
23. Price of feed	
24. Capital required to start the farm	
25. Bargaining power (price determination( over product's sold	
26. Having your own simple hand tools used in the farm	
27. Availability of the required labor in the family	
28. Availability of sufficient time for the women to teak care of her	
farm	
29. Ability to provide quality and sufficient food to kids from	
household production	
30. Opportunity for you to improve and make decision that affect	
the community	
31. Your influence on when and how to use your farm products	
32. Support you get from your husband at house and other works	
33. Your neighbors attitude towards your work	
34. Your knowledge regarding backyard cultivation	
35. Availability of school to your children	
36. Affordability of school related expanses	
37. Availability of quality health services to you and to your family	
38. Access to family planning methods	
39. Access to training	
40. Knowledge and attitude of extension workers	
41. Access to affordable housing	

42. Access to quality housing	
43. Access to information about city and county resources	
available to residents	
44. Ability to cover educational(if z child learn away from school),	
medical or other expanse of children in case of contingency	
45. Opportunity to participate in religious activities at local	
churches	
46. Availability of NGOs that work with women and children	
47. Opportunities available to open small businesses	
48. Availability of employment opportunity	
49. Availability of agencies providing family planning service	
50. Support you get from your husband at house and other works	
51. Your neighbors attitude towards your work	
52. Your knowledge regarding backyard cultivation	
53. Availability of school to your children	
54. Affordability of school related expanses	
55. Availability of quality health services to you and to your family	
56. Access to family planning methods	
57. Access to training	
58. Knowledge and attitude of extension workers	
59. Access to affordable housing	
60. Access to quality housing	
61. Access to information about city and county resources	
available to residents	
62. Ability to cover educational(if z child learn away from school),	
medical or other expanse of children in case of contingency	
63. Opportunity to participate in religious activities at local	
churches	
64. Opportunities available to open small businesses	
65. Availability of employment opportunity	
66. Availability of agencies providing family planning service	

### **Dawit Tafesse**

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### PROFESSIONAL PROFILE:

- Adaptable and dependable professional
- Proven relationship- builder with exceptional interpersonal and communication skills
- Strong organizational and supervisory skills
- Motivated, resourceful, creative troubleshooter who works well in a team.
- Good leadership and managing of resources. Flexible and able to work under stressful **c**ondition

FIELD	QUALIFICATION	UNIVERSITY	YEAR(GC)	YEAR
			BEGINNING	ENDING

## **Educational Background:**

Social Work	MA	IGNOU	2010	2012
Chemistry	B.SC	Alemaya	1997	2000
Computer Science	Diploma	Addis Ababa	2001	2004
Management  and Leader  ship	Diploma	London (distance base)	2009	2010

## **Work Experience:**

- 1. Ministry of Labor and Social Affairs(MOLSA): From 2014 Present
- ✓ Environment and OSH Team Leader, and
- ✓ Advocacy and policy formulation officer

# Key responsibilities

- Writing Environmental Mgt Plan in implementing policies that minimize an industry impact on the environment.
- Conduct environment mitigation measures to minimize project impact on the natural environment.
- Identify and mitigate environmental and social project impact and stimulate sustainable development opportunities.
- Carry out environmental and social assessment of industries as per requirement of prepared check list.
- Finding alternatives, eco friendly materials and find green ways of disposing waste products(recycling) to reduce waste.
- Awareness, advocacy and training. Training needs analysis organizing trainings and workshops and implementation.
- Enforcement of laws, policies and strategies.
- Quarter, mid and annual reporting. Preparing periodic reports on the status of activities planned by the ministry or together with partners.
- Preparation of manuals, guidelines and pamphlets.

- Tripartite social dialogue for harmonious industry.
- Checking bylaws of industries and enterprises

## 2. Addis Ababa Bureau of Labor And Social Affairs From 2013- 2014 G. C

### OSH, Law Enforcement team

- Ensure effective implementation of the project through timely provision technical inputs, effective delivery of outputs, and monitoring and evaluation of project activities of partners.
- Gap assessment Study and training. Recommendation to management for remedial action.
- Collaboration with project partners, target groups and donors for planning and implementation of program activities.
- Coordinate with project partners to increase the project's visibility and facilitate the scaling up of project's interventions.
- Enforcement of laws and policies.
- Prepare periodic reporting on the status of activities planned by the bureau and partners.
  - 3. Andinet International school

### From 2006-2013 G.C

### **Key responsibilities**

- Leading ,organizing ,planning and monitoring the Department members
- Organizing, evaluating and inspect physics, chemistry, biology Labs.
- Organize Annual Science Fair in a team work base.
- Designed and implemented middle school syllabus and curriculums.

- Develop daily, weekly and yearly lesson plans in accordance with the principles and guidelines of the school.
  - 4. Sub Saharan African research and training center: From 2012- 2014
- Social and environmental research method development.
- Analysis of social and environmental data.

## **Training and Work Shops**

- ➤ EnvironmentalHealth and OccupationalHealth, The Ohio State university ,one health summer institute, May1- August 31,2014
- Guidance on Social Responsibility, based on ISO 26000:210 Ethiopian Standard Agency, certificate no.CS:224-2007
- ➤ Basic Management Skills, Ethiopian management institute, June 20/2014
- ➤ Training of trainers on Occupational safety and health, Addis Ababa Labour and social Affairs.
- ➤ Social Budgeting and Actuarial Modeling, ILO, ITC training Center.

### **Publications and Books**

 Approved Research Proposal by ARLAC (African Regional Labour Administration Center, ILO) by the title "Socio Economic impact of displacement for Marginalized Women"

### A case study of Urban Marginalized Women

- Research team leader, the research entitle "the role of vocational and skill training on participating Labour force to the Labour Market".
- General Chemistry book published by Ministry of Education
- Environmental and integrated Science book by Addis Ababa Bureau of Education.
- Occupational Safety Management System Manual, Ministry of Labour and Social Affairs
- Environment impact Assessment check List, environment protection Authority and Ministry of Labour and social Affairs.

#### LANGUAGE:

• English and Amharic (fluent in writing, speaking, listening and reading)

#### References

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## Proposal

### Introduction

### **Background of the study**

Homestead farming/ Backyard crop and livestock production is one of the viable alternative systems for improving the livelihood of rural households. More importantly, the sector is contributing enormously towards ensuring food security of poor households who otherwise have very limited opportunities due to academic preparation and lack of major means of production. Besides improving consumption and enhancing nutritive intake the sector serve as source of income for thousands of rural women. However little attention in particular has been paid to the women, who tend to be predominating in the sector,

Women farmers are the main food producers in developing countries and yet they are among the most vulnerable groups (Karki, 2009), Studies have shown that women play major roles in key farming operations such as planting, weeding, and harvesting, to the extent that certain crops are designated as "female" crops in some areas. In Africa, women account 75% of household food production; thus means food security were depended primarily on it (Ganity, 2006). Despite this women have been left out of the formal agriculture extension process and the formal structures for rural development. By preventing women equal access **to** agriculture extension advice, inputs and financial credit, household food insecurity has been exacerbated (Frank E. 1999). By superimposing gendered analysis on the agriculture sector, a number of development priorities began to emerge. Homestead farming is one of those,

### 8.2.1 Women in backyard crop livestock production

Review of literatures on pertained issue show women primarily, and most often exclusively, responsible for tending to backyard gardens, cleaning animal barns, feeding, watering, milking, milk processing and looking after poultry and small ruminants. In Africa context, backyard gardening is predominantly practiced by women. Women play pivotal roles in subsistence and market gardening, animal husbandry; food processing, waste recycling and (re)use(Alice J. Hovorka, 2001). Study by Galfato G. etal (2015) shows women contribute more than half of labor requirement of home garden. They also play active role in the choice of crop/livestock cultivated at backyard. Women contribute to genetic improvements of plants by a continuous selection process as well as domesticating food and medicinal plants

that are now found in every home garden sometimes described as genetic gardens (FAo, 1999).

Resent literatures also identified linkages between waste management and women's participation in back yard farming that facilitate both household food security and local environmental sustainability. (HaileTuleu, 2010). Women are environmental resource managers who (re)use and recycle materials to enhance crop and livestock yields to feed their households and communities. For example women in Ethiopia use animal manure and backload fuel wood to satisfy energy needs for cooking and food processing. Waste from household and cattle shade used to maintain the fertility of the homestead plot.

Besides improving nutritive intake and food consumption backyard cultivation provides income that can be invested either on children or to fill minor gaps at home. Which enhance social status as well as decision making power of women in a family. *Luc J.A. Mougeot* states that there is no doubt that home based agricultural connects well with women's traditional childcare and general household management roles. It allows them to strengthen food provisioning and work close to the home. Most women farmers are probably engaged in self-provisioning to a larger extent than men (Hovorka 1999). The sector is particularly significant for women with larger families to feed and/or support (Dennery 1996, Maxwell 1995). There is evidence that backyard farming can give women greater control over household resources, budget, decision-making and benefits. Many re-invest their savings into their children's education, into small upstream (bulk purchase and retail trade of manure, Haiti) or downstream (food processing and street vending, Nairobi), as well as into other small businesses (Dennery 1997, Chauca 1999, Moustier 1996).

### 8.2.2 Existing constraints

In spite of all these contributions women's participation in and contribution to agriculture has been masked by reference to a so called "farmer". This supposedly gender neutral term suggests an undifferentiated dweller who engages in agriculture yet is undoubtedly based on a masculine norm.( Alice J. Hoveorka 2001). This has led to a series of structural barriers, augmented by local cultural perceptions, that have largely precluded women's participation in the agricultural extension process. This coupled with **lack of property ownership** and decision making in a family makes the practice less responsive to full fill the women as well

as the family needs. But when we go to individuals home, it is the women and girl children of the family that shouldered the responsibility of taking care of vegetables and other crops planted in a backyard and cattle kept at home.

Most challenge women farmers faced come from differential treatment of man and women which manifested in the family, schools and even in the society. Gender gap is manifest in various facets of life. In agriculture, this include among others, access to and control of tangible and intangible resources, as well as division of labor at the household level and among farming activities. Wilbers (2003) observed that traditions of patrilineal inheritance limit women's access to acquire land to live and do subsistence farming.

Gender differences also exist between women heads-of-households and men heads-of-households. Female farmers in female headed households tend to limit their labor input in farm activities because of heavy commitment to reproductive roles such as nurturing and caring for children and attending to elderly members of the household (Kamara et al., 1993). It turns out that in many cases, women use small lands, like backyard, primarily for subsistence crops to feed their families while men cultivates cash crops and keep the income. Unless these structural and cultural barriers are actively addressed by agricultural development programs women's location within the agricultural production process will continue to be marginalized hampering efforts to obtain household food security at a regional and national level.(Frank E.,1999)

This statics justifies it is noteworthy to see input use and adaption, its presence, potentials, and associated risks in relation to women's conditions and needs on the basis that women are relatively more disadvantaged than men

Like the concepts of class, race, and ethnicity, gender is an analytical tool for understanding social processes (Working Document, 1998). as a result It is important to see homestead farming presence, potentials, and associated risks in association with the existing power relation between men and women, sexual division of labor, access to and control over resources.

### Statement of the problem

In our country various governmental and non governmental organizations work among women farmers , with the aim of not only providing source of income but enhancing nutritive intake and consumption as well. However condition of women in the country deteriorates from time to time. Despite efforts made by government and other development actors including NGO's operating to alleviate women's poverty in Ethiopia, women remain the poorest of the poor. They access less resources and opportunities than men. Female headed households (FFH) that constitute 26% of households are among the poorest in the country and they suffer from chronic food insecurity (SDPREP, 2000).

To facilitate greater understanding of women's participation in agriculture activities, several important issues must be considered. It is important to include women idea, belief, and needs in development programs, in order to insure equal benefit of women. While planning and designing agriculture interventions special consideration has to be made for poor and marginalized women who has limited opportunity. Innovative solutions will be required to ensure that women maintain a reasonable level of food and nutritional security. Projects should consider the costs, labor and time involved visa vies the contemporary situation of poor women. Technologies need to be responsive to labor, water and land requirement. Without considering the existing situation projects may end up being additional burden to the poor.

Backyard cultivation is practiced for multifaceted objectives ranging from subsistent household consumption to commercial drives. It plays key roles in ensuring food security of the poor and destitute households and creates employment opportunities and means to support poor women with source of cash income. The benefits of home based cultivation and cattle keeping transcend economic considerations and enter the social realms as it helps empower women with a better decision making power in the family through the income they earn.

However, interventions so far implemented by various stakeholders working in the area have not been gender sensitive and failed to recognize the unique production objectives, needs and constraints faced by women farmers. This problem is not limited to the interventions that have been put in place to benefit poor farmers but also prevalent in the research and studies conducted to analyze the impacts of agricultural interventions and supposed to generate an input for a well-informed decision making. Given these gaps in research and development pertaining to the topic, this study will be conducted to understand and identify women farmers'idea in relation to cotemporary social, economic and cultural contexts which the agriculture programs, policies and projects need to put into consideration in order to improve women's benefit from the sector.

### The research questions

- What are the significance of backyard crop and livestock production to the household food security and employment of women?
- What are the major challenges that influence women farmers? And how they deal with it
- What are the productive objective of women farmers from homestead farming?
- To what extent are the current agricultural policies, programs and interventions found to be responsive in gratifying poor and marginalized women's need?
- What factors affect women to use input and other technologies?

## Objective of the study

The main objective of this study is to identify and understand the role of backyard crop and livestock production for the socio-economic empowerment of women in Amhara Region

#### 8.2.3 Specific objective includes

- Assess socio-economic significance of backyard crop and cattle production (fattening)
  to household food security ingeneral and income and employment of women in
  particular in the study areas
- Study major challenges in backyard farming and the coping mechanisms adopted by women
- Identify specific production objectives and practices of women involved in backyard farming

 Forward informed recommendations regarding the modalities of support that should be put in place by external actors, including governmental bodies and NGOs towards success of women involved in backyard farming

#### STUDY METHODOLOGY

#### Study design

In this research, the researcher contends that the qualitative approach is the best option. This is because an analysis of the Role of Backyard crop and cattle production for the socio economic empowerment of women in the study area demands a methodology that takes into account the voice of women and how they perceive their role in agriculture and what they need from interventions and programs from their own perspectives. However, the qualitative method is not exclusive in this study as the researcher also used, quantitative method in combination with the triangulation approach. Beyond the qualitative, this researcher also adopted the case-oriented approach (network mapping) and reviewed gendered impacts of the 2014-2015 Input Voucher System (IVS)

#### Qualitative method

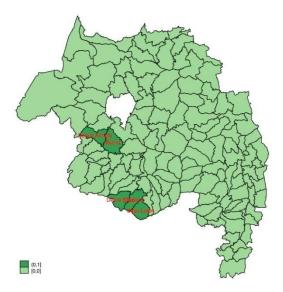
The qualitative information will be obtained from focus group discussions with women/men only and mixed groups, informal conversations, observing community practices and other methods like key interviews with key ACSI staffs; development agents and other relevant partners. This will be highly complemented with the use of a gender analysis framework that will clearly look at access and control profiles, factors and trends as well as the program/project cycle analysis

#### **Quantitative method**

The quantitative assessment will primarily consist of a household questionnaire administrated to men and women respondents. Moreover secondary data also will be used to shape the survey design as well as augment the primary data collected via a household questionnaire.

### Universe of the study

The researcher proposed to conduct the study in Amhara region at five wereda found in Amhara region, namely Debre Elias, Gozamen, Baso Liben, Mecha and South Achefer. Data will be collected from men and women farmers; local administrators; extension workers; cooperatives and ACSI (Amhara Credit and Saving Association) staffs in the selected weredas, which constitute the universe of the study.



## **Sampling procedures**

The researcher will use purposive sampling and stratified random sampling to draw the respondents to various research tools used

Purposive sampling will be employed to select respondents and target stakeholders for FGD (Focused Group Discussion) and key informant interview. Wealth status, social (marital) status and size of cultivated land will be considered in selecting the respondent women and men farmers included in FGD. Depending on the size of wereda and other factors like time and budget available two to four FGD, separately for men and women farmers, will be conducted in each wereda. In each FGD 8 to 12 respondents will be participated.

While a great deal of this analysis will focus on FGD and interviews, a critical component related to impact will be a relatively detailed household questionnaire. Outlined below, the household questionnaire will be given to approximately 320 households in eight woredas.

The eight woredas include the five woredas where IVS piloted as well as three out-of-sample woredas. This questionnaire will be administered to both men and women within a married household (although the married women's questionnaire will focus on a relative few targeted questions) as well as single heads (primarily women).

After the remaining three control woredas are chosen, a two-stage sampling technique is purposed that includes taking a sample of kebeles as well as households within the identified kebele. More specifically, the sample frame will choose a minimum of 2 kebeles per woreda, randomly chosen from the determined woreda-level kebele roster. Some allowance may be made for relative population or the relative variance of other key variables such that additional kebeles may be selected from woredas s. While the initial survey design recoomends 16 kebeles a maximum number of kebeles is 20. The second phase of the sampling design will be to randomly select 20 households from each kebele rooster. Therefore, given a maximum number of kebeles (20) and a sample size of 20 households per kebele, the survey questionnaire will be administered to no less than 320 households.

An initial look at the area of the pilot is demonstrated below.

#### Data collection tools and procedure

Both quantitative as well as qualitative methods will be employed in this study. While more emphasis was given to the qualitative method, quantitative analysis was used as a supplement to the former approach. Both primary and secondary data sources are going to be used. Triangulation method will be employed to cross check and validate data to be collected from the various sources and methods.

#### Primary data sources

Primary data will be generated using **questionnaire**, **focus group discussions** and informal interviews with key informants. The checklist and the questions for the study will be pretested in the beneficiaries to check whether the questions captured the key aspects of the study. Qualitative methods are usually employed for deeply rooted studies that attempt to

interpret social reality (Roger and Nall, 2003). Gender issues being one aspect of social reality, qualitative analysis is believed to provide an appropriate understanding of the subject. In accordance with the above, this research mainly focused on qualitative method with the view of assessing the areas and extent of satisfaction of women from the intervention on agriculture and also identifying the challenges faced by the clients in the undertaking. **Observation** is also another tool to be used to have detailed information. Focused group discussions will be conducted on selected samples and the researcher observes and record women outlook regarding their achievement and expectation, as they express it with their own words.

#### Focused group discussion guide

FGD is a type of group interview which allow the researcher to group interaction. Focuses groups are considered to be naturalistic (Krueger and Casey, 2000) since participants generally are allowed to say anything they'd like in focus groups sessions. The method strive to produce good conversation and the researcher listens not only for the content of focus group discussions, but for emotions, ironies, contradictions, and tensions. This enables the researcher to learn or confirm not just the facts but the meaning behind the fact. Such FGD will involve the use of a set of predetermine questions and of highly standardized techniques of recording like tape recorder. The researcher in a FGD is facilitator and the group interaction will be recorded

#### Questionnaires

Furthermore, the questionnaires should be use to collect quantitative data. When researcher use questionnaires, both closed-ended and open-ended questionnaires should be employs in order to collect the primary data.

#### **Interviews**

Additionally, for case of qualitative information, researcher use interviews in order to gather primary data. The interviewees who participate in this study have to be those who have a good experience, important knowledge and skills in relations to the specific problem. In this study, the interview method to collects data involves presentation of oral/verbal questions and

replied in terms of oral/verbal. This method should be use by the researcher through personal interviews.

### Secondary data

Apart from the primary sources, secondary data including publications, research and reports in the area of homestead farming and programs on women, reports from publication of selected organizations have been referred and consulted.

## **Data Processing Procedures**

After collecting both qualitative and quantitative data from the study sites, the data gathered from the field will be edited and checked to ensure consistency, legibility and comprehensiveness.

### **Data Analysis**

Both qualitative and quantitative data will be analyzed using The SPSS statistical computer software (SPSS for window, release 15.0, 2006). Frequency procedures, ranking and sorting will be employed to analyze the quantitative data. Simple compilation, organization, triangulation procedures will be employed to analyze and present the qualitative data.

# Chapterization

The chapterization of the thesis is proposed to be made keeping in mind the objective. This thesis will have five chapters. The first chapter will introduces the theses deals with presenting the purpose of the study, basic research questions, significance and limitation of the study.

Chapter two will reviews the available literature. The methodological approach and design of the study shall be discussed in chapter three. Chapter four to seven will present the results and interpretation of the study. The last chapter will include findings, conclusions and recommendations.





