Journal of Alternative Perspectives in the Social Sciences (2011) Vol 3, No 3, 508-550

Gender Mainstreaming Through Extension: Problems and Prospects

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Abstract: *Women are the main farmers or producers, but their roles remain unrecognized. Despite the necessity of utilization of untapped potential of men and women, failure to address gender based differences bring about disparities in development outcomes in general an agricultural extension particular. Thus it requires gender mainstreaming in multi dimension of the development activities. This study focused on assessing the problems and prospects of gender mainstreaming in agricultural extension in Ethiopia. A multi-stage sampling procedure and systemic random methods were used to select three KAs and 120 sample respondents. Interview schedules and focus group discussions were adopted for data collection. Descriptive statistics was employed for data analysis. To assess whether gender is mainstreamed in agricultural extension or not, any benefit, role and responsibilities, involvement and situation of women against men was compared in three different ways. Female headed household and male headed households are compared on gender issues that are related to households as a whole. Husbands and wives are compared on gender issues that are concerned with relations between spouses. Female heads, husbands and wives are compared on gender issues that consider both of them at individual level. The study is focused on extent of social relation, freedom of mobility, time availability, access and control over resources, decision making authority, participation and intra violence that preclude gender mainstreaming in agricultural extension.*

The results of the study reveal that the percent of illiterates in both female heads and wives is much higher than that of husbands indicating the less education access given to women during their school ages that affects their preparedness to adapt change and new technologies easily. Also women's involvement in district council, cell leader and cell member is very low as compared to men. There exists violence in both wives and husbands expressed differently. However violence in husband is lower than in wives. Wives are restricted from mobility mostly by their spouse. Female heads have least access to resource as compared to husbands and wives. Female heads have the highest decision making power and control over resources to what they have access to. Wives have less control due to the fact that their control over resources is mostly either joint control, or no control. Decision making power of wives is found to be less on most of

productivity determinants. Husbands have more extension opportunities than female heads and wives because wives have less extension contact; less trained and got the least extension services as compared to female heads and husbands. Therefore, it is recommended that to revive the integration of agricultural policy to use cells, women organizations and health posts as a medium through which agricultural extension message is transmitted at KA level is vital.

1. Background and Rationale

Despite the need for utilization of untapped potential of men and women, failure to address gender based differences brings about disparities in development outcomes in general and agricultural extension as well. Gender issues must be addressed in development because first, gender dimension is crucial for economic reasons and from the efficiency point of view. This is true in the agriculture sector, where gender inequalities in access to and control over resources are persistent, undermining a sustainable and inclusive development of the sector. Second, equity or distributional issues are related to gender differences in outcomes. Gender differences, arising from the socially constructed relationship between men and women, affect the distribution of resources between them and cause many disparities in development outcomes. Third, gender roles and relations affect food security and household welfare and critical indicators of human development. Last, but not least, gender equality is a basic human right, one that has value in and of itself in man (World Bank, 2009).

Four decades of research demonstrates the varied and crucial responsibilities that women hold in agriculture and the value of their contributions, both economic and social. Rural women produce half of the world's food and in developing countries, between 60% and 80% of food crops. Women also are more likely than men to spend their income on the well being of their families, including more nutritious food, school fees for children and health care. A failing of past efforts to reduce hunger and increase rural incomes has been the lack of attention paid to women as farmers,

producers and farm workers – both wage and non-wage. Women receive only 5% of extension services worldwide, and women in Africa access only 1% of available credit in the agricultural sector (Rekha et al, 2008).

Gender inequalities limit agricultural productivity and efficiency and in so doing, undermine development agenda. Failure to recognize the different roles of men and women is costly because it results in misguided projects and programs, forgone agricultural output and incomes and food and nutrition insecurity. It is time to take into account the role of women in agricultural production and to increase concerted efforts to enable women to move beyond production for subsistence and into higher-value, market-oriented production (World Bank, 2009).

Although many analyses draw attention to women (since it is generally women who face disadvantages and women's views that tend to be overlooked), a gender analysis looks at the relations (differences, inequalities, power imbalances and differential access to resources) between and among women and men. The position of women cannot be understood in isolation, from the broader relationships between women and men. Men and women face different obstacles and draw on different resources when attempting to participate (UNDP, 2003).

Gender mainstreaming is defined as the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences, an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality (Ministry of Foreign Affairs of Denmark, 2008).

Gender mainstreaming was established as a major global strategy for the promotion of gender equality in the Beijing Platform for Action from the Fourth United Nations World

Conference on Women in Beijing in 1995 (United Nations, 2002). In measuring progress of gender mainstreaming, Hanoi (2004) stated the key indicators such as (i) Female/male ratio of attendance at extension services (ii) Content of extension services compared to farming activities of male and female farmers (iii) Male/female ratio of extension service staff (iv) Women's access to factors of production compared to men's access (v) Women's power in decision-making in the household after participating in extension services etc.

Women in Ethiopia, in spite of their contributions to the well being of their family and community affairs, women experience lower socio-economic status in general and hence is marginalized from making decisions at all levels. Women are facing multiple forms of deprivation such as gender based discrimination, lack of protection of basic human rights, violence, lack of access to productive resources, education and training, basic health services, and employment are widespread (National Committee for Traditional Practices Eradication, 2003 cited in Wabekbon Development Consultant, 2006). Ethiopian culture and society is heavily biased towards benefiting men with women experiencing even greater inequalities in access to resources, than most of other African countries. Despite their unequal share with men in socio-economic life, Ethiopian women have little role in decision-making, and a minimal share of resources and benefits (Reshid Abdi, 2002).

The country's economic and social development is also being adversely threatened by HIV/AIDS. It was estimated that 1.9 million people are living with HIV/AIDS and out of this 1.1 million are women. Maternal mortality is also high in the country constituting 871 deaths per 1000 lives (Prime Minister Office/Women's Affairs Sub Sector, 2004). Women have a significantly lower employment rate than men, and have little representation in decision-making positions. Nearly 43 percent of women are unemployed, and over 36 percent of them are chronically unemployed**.** Domestic violence is a deeply rooted, culturally accepted practice, with 85 percent of Ethiopian women believing that a husband is justified in beating his wife for at least one of the following reasons: preparation/cooking food (65%), arguing with him (61%), going out without informing him (56%), neglecting the

children (65%), or refusing sexual relations (51%) **(**World Bank, 2003**).**

Many development packages and extension educations are forwarded in agricultural to change the livelihood of farmers as a whole. However husbands and wives in the household have different roles & responsibilities, opportunities and constraints, priorities and needs. These gender differences between men and women causes disparities in development outcomes. But many development packages and extension educations don't well address such differences. There is dearth of strategies and systems to address gender related differences between men and women. This requires identifying the problems that preclude gender mainstreaming. Understanding the problems which men and women face in agricultural extension is one part of the solution for extension personnel in gender mainstreaming so as to design suitable remedial measures. Hence this paper is based on a research study focused on problems that preclude gender mainstreaming and the prospects of gender mainstreaming in agricultural extension in the study area.

2. Objective of the Study

The general objective of this study is to assess the impediments and prospects of gender mainstreaming in agricultural extension in Mekedela district of Amhara Region, Ethiopia and the specific objectives are…

- To analyze the problems and prospects of gender mainstreaming in the study area.
- To compare access to and control over resources between men and women
- To trace out the gender gaps between men and women with reference to decision making authority
- To assess and compare extension service opportunities between men and women in the study area

3. Methodology Adopted

South Wollo is one of the eleven zones of Amhara region in Ethiopia, having a total population of about 3 million (BoFED, 2006). The district Mekedela under Sourth Wollo zone is divided in to 29 villages, (28 rural and 1 urban). A multi-stage sampling procedure was used to select the Kebele (village) Administrations (KAs) and sample respondents. At the first-stage, from 21 districts found in South Wollo zone, one district namely Mekedela has been selected purposively since it is a model district related to farmers training centers (FTCs), natural resource regeneration and other extension group activities in the past. However, little attention is given in conducting research on extension and gender issues in this area. At the second stage the district was stratified into three categories based on altitude: high land, mid land and low land and 7, 8 and 13 KAs are included in high land, midland and low land respectively. From each stratum, one KA was selected randomly. At the fourth stage, 120 sample including 96 male and 24 female-headed households (HHs) were identified from the selected KAs using proportionate to the size. From the selected male HHs, 50% husbands and 50% wives were included as sample respondents. Systematic sampling technique was employed to select these 120 sample households from the list of total household's record available in the KAs.

Both primary and secondary data were gathered and used. Primary data was collected from sample respondents on different issues related to demographic characteristics, resource endowment and gender issues. Secondary sources include review of reports, publications and documents containing information about agricultural production, population, topography and climatic conditions, institutional supports such as access to input, extension services and improved technologies. This was used as additional information to strengthen the primary data collected from the respondents for rational conclusion.

According to Helen Derbyshire (2002), gender mainstreaming depends on the skills, knowledge and commitment of the staff involved in management and

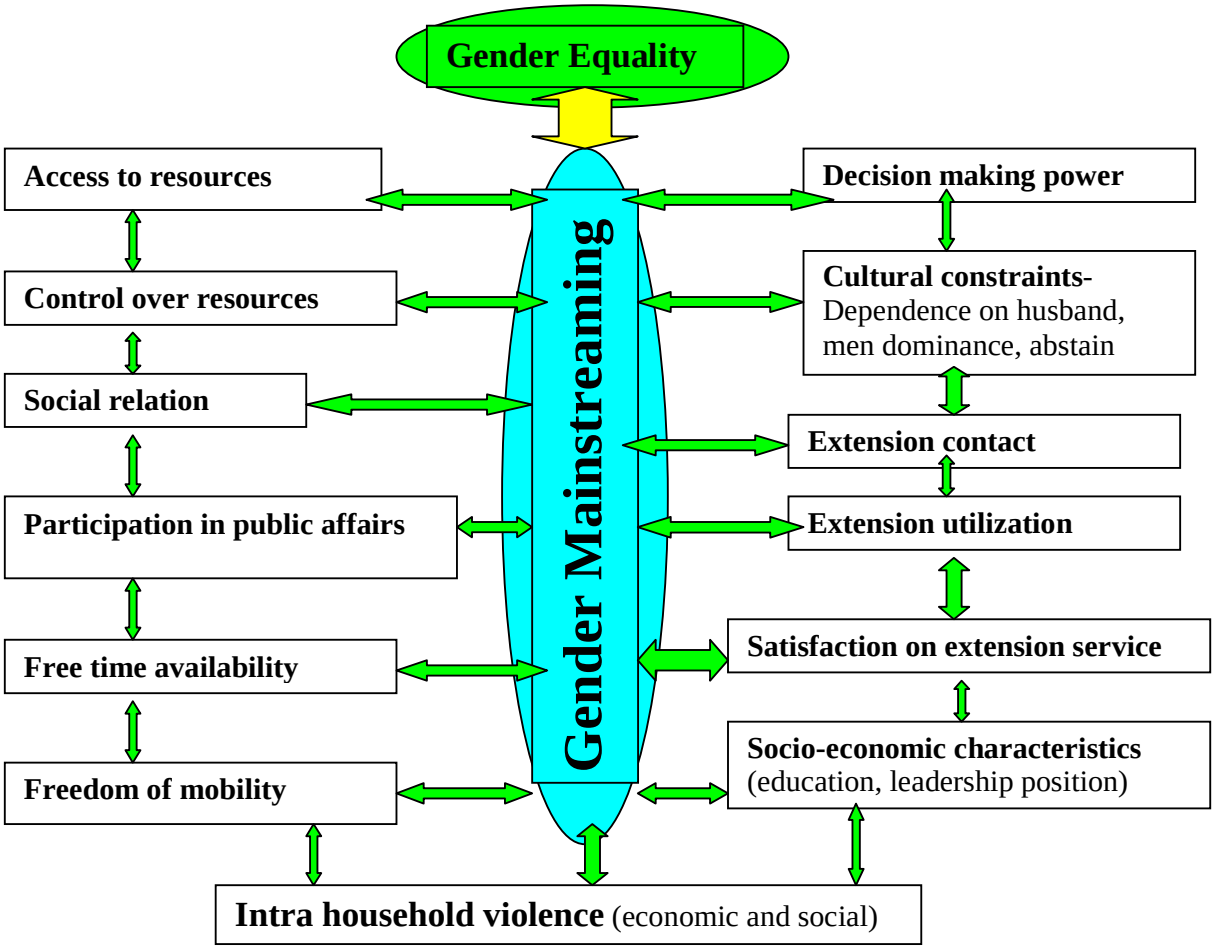
implementation. Hence during the data collection the author tried to triangulate the information from respective offices and group discussion. Qualitative data such as problems of women, the way in which the development bureaus addresses women issues, the function of gender facilitators and extent of women participation in extension and in political organization was collected through focus group discussion, informal and formal discussions with district extension personnel, development agents (DAs) and district women affairs officials. Quantitative data was collected through personal interview using structured interview schedule that focus on gender mainstreaming issues.

Data obtained from interview was compiled, screened and analyzed by using descriptive statistics that helps to answer the research questions. The data was analyzed using SPSS version 12 windows. This was done by using measures of dispersion like mean and standard deviation to depict gender mainstreaming issues in terms of decision making power, roles, access to and control over production resources. In addition, percentages and tables are also used.

4. Conceptual Framework

Gender mainstreaming is a strategy and its ultimate goal is to achieve gender equality in the perspective field. Since gender equality means an equal visibility, empowerment and participation of both sexes in all spheres of public and private life, and gender mainstreaming is incorporation of a gender equality perspective in all development.

Figure 1 Conceptual Framework



Source: Framed by the Author

policies, strategies, and interventions at all levels and at all stages by the actors normally involved therein whether the strategy is being put into practice or not can be measured in its goal. It is possible to say that gender is mainstreamed in agricultural extension when men and women have equal in….

- Participation in public affairs
- Resource endowment
- Access to resources
- Control over resources
- Decision making power
- Status in the household
- Leadership in the community
- Available free time
- Freedom to mobility
- Intra household violence
- Extension contact
- Extension utilization
- Satisfaction on extension service
- Education level

Therefore this indicates that gender mainstreaming, as a strategy for gender equality in agricultural extension is the combined result of all the above issues. Thus the dependant variable for this study is gender mainstreaming and measured in terms of equality of the independent variables between men and women in agricultural extension. It was hypothesized that gender is not well mainstreamed in agricultural extension expecting that women have less access to resources (credit and technology), less control over resource, less extension contact, less freedom to mobility, less participation in public affairs, less decision making power in the household, less available free time, less extension utilization, more cultural restrictions, less resource endowment (land holding, oxen ownership) and less satisfaction on extension service than men.

5. Results and Discussions

The gender mainstreaming indicators are expressed in tables comparing their percentage, mean and standard deviation of men and women. There is no way of assessing whether gender is mainstreamed in agricultural extension or not rather than comparing any benefit, role and responsibilities, involvement and situation of women against men. Hence the comparisons between men and women are made in three different ways: (i) Female and male HHs are compared on gender issues that are related to households as a whole, (ii) Husbands and wives are compared on gender issues that are concerned with relations between spouses (iii) Female heads, husbands and wives are compared on gender issues that consider both of them at individual level. This means that the

study revealed whether female heads, husbands and wives involved equally in development issues, government organizations responded equally to the needs and interests, and benefits were distributed equally or not. In general the study revealed whether gender is mainstreamed or not in the study area on the basis of equalities/inequalities between men and women. Descriptive statistics such as mean, standard deviation, percentage, frequency tabulation and t-test were employed to consolidate the results.

I. Socio-economic characteristics of sample respondents

Age has its own effect on gender mainstreaming. Different variables may not show similarity across age groups. To understand its relation to other variables, respondents are categorized in to six age groups criteria. Out of the total, majority (38.33%) of the respondents are in the age category of 35-44. The study also reveals that 45.53% of female head and husband respondents are between the age of 35-44, while majority (41.66%) of wife respondents are in between 25-34 years old.

Family size can affect gender mainstreaming in such a way that an increase in family size accompanied by more number of dependents force women to spent majority of their time on care and nourishment of their family. This will retard their involvement in different socio-economic activities out side their homestead. On the other side, the decrease in the number of productive family members will create work dilution on the side of women due to the triple role of women (productive, reproductive and community role). Therefore it is important to view the distribution of respondents based on their productive forces. The number of productive (between the age 15 and 64) respondents in this study is categorized in to five. The average family size is 3.46 in female HHs and 5.56 in male HHs. The percent of female HHs having less than three productive family members is 79.4%, while it is only 47% in male HHs indicating that there is shortage of labour in female HHs as compared to male HHs that directly influences their productivity, income diversification and their involvement in labour intensive profitable economic activities.

Education is an opportunity to develop skill, to see alternatives and make better decision, facilitate changes, adopt new technologies and improve the livelihood as a whole. So it is necessary to identify the extent of education gaps between female heads, husbands and wives so as to understand the influence of education level in gender mainstreaming. The difference in education level brings about differences in implementation and outcome of development initiatives. The survey result indicates that the percent of illiterates of female heads, husbands and wives is 87.5%, 54.17% and 85.41%, respectively. This shows that the percent of illiterates in both female heads and wives is much higher than that of husbands indicating the less education access given to women during their school ages that affects their preparedness to adapt change and new technologies easily.

Land holding is the total area of cultivated land owned by the respondents measured in hectare. Farm size is often correlated with farm income and wealth. Adequate size of land holding is the basic requirement for utilization of different types of packages. The total land size owned by respondents is found to be different across different age groups in cross tabulation. Specifically over 90% of the respondents, who are between 18 and 24 years old and >64 years old, have a land size of less than 0.75ha. While 39.5% of the respondents between 25 and 64 years old, having a land holding size of 0.75-1ha. The percent of female HHs having a land size of less than 0.75 hectare exceeds from male HHs by 25%. This indicates that shortage of land is serious problem among female HHs. This result is confirmed with Wude's (2005) finding.

The type of land utilization influences production and productivity. Share cropping in is also one of the off farm activity that increases the income of the farmers at the expense of the share of the land owner. On the contrary, share cropping out is an option not to leave the land uncultivated because of farm implement, input and distance related problems to accomplish the conventional farming system. Those involved in share cropping in are more benefited than those involved in share cropping out. So it is

important to know whether men and women are benefited equally or not regarding land utilization. The percent of female HHs using share cropping out is 29.17% while it is 8.33% among male HHs. This shows the seriousness of farm implement, input and distance related problems among female HHs and hindrance to apply crop production related technologies effectively. On the contrary, the percent of female HHs respondents using share cropping in is 4.17% while it is 18.75% in case of male HHs.

Oxen are the primary draft animals on which the farming community, during planting and land preparation period depends. The number of oxen owned by respondents is an indicator for means of production. The availability of draft power is the main issue to decide on share cropping in and share cropping out that directly influences the yield obtained from crop production. Repeated land preparation for increased on farm yield and share cropping in for increased off farm yield is only possible with the availability of oxen. Therefore in order to be aware of this influence, it is important to compare the availability of oxen across male HHs and female HHs. The survey result indicates that the percent of female HHs and male HHs respondents having no oxen is 79.17% and 51.04%, respectively. 14.5% of male HHs has more than two pair of oxen. While none of sample female HHs has more than two pair of oxen.

The role the female heads/husbands/wives/ plays in the community is related to the positions placed either as group member or leader. Being a leader creates self confidence and takes advantage of strong linkage with different information sources, be aware of the changes in conditional and on going issues, and take the advantage of priority in all rewarding areas as the result of their leadership position they placed. Hence, recognizing the leadership position of the respondents is essential to evaluate how men and women differ in gaining these benefits. The result clearly shows that women in general and wives in particular have less exposure and empowerment to be elected as compared to men. Because the cell based structure doesn't assume equal participation of women in cell and group membership. This inhibits women to play the leading role in all development initiatives. Similarly Dereje (2005) reported that farmers who

have a leadership position in the society might give a better opportunity to access resources and inputs such as labour, fertilizer, seed, to contact with DA for better information, better access to credit providers.

II. Analysis of Impediments and Prospects of Gender Mainstreaming

Since the overall goal of gender mainstreaming is to achieve gender equality and raise the status of rural women, this study assessed the reflection of gender in the study area and analyzed the impediments in terms of participation in public affairs, free time availability, freedom for mobility, cultural constraints and social relation to mainstream gender in agricultural extension.

A) Impediments to Gender Mainstreaming

To understand the gender gap in political participation in the study area, district level data was collected and analyzed along with the support of primary data and summarized.

Under Representation and Low Political Participation of Women: As quoted in the methodology, the sample district is divided in to twenty eight rural and one urban village. Each rural village is sub-divided in to three sub-zones. In each sub-zone, a cell is organized by village administrators through the direction given by the district office of political organization. Cell is the smallest unit of political organizational structure and it consists of 20-30 development groups. The cell has its own leaders and consists of 7-45 members. The development groups are led by cell leaders and affiliated members of the ruling political organization. All cell leaders are members of the ruling political party but the development groups under the cell include non-members also. All extension and other sectors' messages are transmitted through these cells.

Table 1. Participation of women in the Councils, Cell and Development group

Membership	Male		Female		Total	
	N	%	N	%	N	%
Membership in district council	8400	78.31	2326	21.69	10726	100
Membership in village council	60	60	40	40	100	100
Cell leaders	1388	94.81	76	5.19	1464	100
Cell members	9014	83.39	1796	16.61	10810	100
Development group members	25422	54.93	20856	45.07	46278	100

Source: Mekedela District Office of Amhara Nation Democratic Movement, 2010.

The table 1 reveals that the participation of women in district council, cell leaders and cell member is 21.68%, 5.19% and 16.61%, respectively. While the participation of men in all the positions are higher which implies that even though women become the member of the ruling political party, their involvement in district council, cell leader and cell member is very low. It is the district council with limited participation of women that makes decision on issues related to both men and women. Cell leaders and cell members are also the decision makers at village level on conditional issues that need community involvement. It is obvious that the concern for women cannot be realized without fair participation of women. The reason for this low participation is the little attention given to women involvement in cell leaders and members during the establishment of cell based structure. This low political participation and under representation of women in decision-making structures lags them behind men to access different opportunities.

Table 2. Distribution of respondents based on their participation in public affairs

Participation in public affairs	Female head(n=24)		Husband(n=48)		Wife(n=48)	
	scale		scale		scale	
	0	1	0	1	0	1

	N	%	N	%	N	%	N	%	N	%	N	%
Participation in community meeting	3	12.5	21	87.5	1	2.08	47	97.92	15	31.25	33	68.75
Participation in local planning	4	16.67	20	83.33	3	6.25	45	93.75	25	52.08	23	47.92
Participation in development activities evaluation	6	25	18	75	4	8.33	44	91.67	30	62.5	18	37.5
Organized in groups	5	20.8	19	79.17	2	4.17	46	95.83	25	52.08	23	47.92
Decision making role in the group	5	20.8	14	58.33	4	8.33	42	87.5	7	14.58	16	33.33
Participation in compromising	7	29.17	17	70.83	3	6.25	45	93.75	25	52.08	23	47.92

Source*:* Survey results, 2010

Note: Scale Yes = 1, No =0

In addition, the lower participation of women in development groups is reflected in table 2. Among the varieties of participation listed, community meeting, organizing into groups and decision making role in the group are bases for flow of many bottom up as well as top down development issues. Among them, participation in community meeting is vital to disseminate information, to explore perceptions, to find out alternatives and solve problems. The percent of participation of female heads, husbands and wives in community meeting is 87.5%, 97.92% and 68.75%, respectively. Participation among wives is lower than female heads due to their dependence on husbands or domination of their spouse that they miss most of the meetings. Though the participation of female heads is lower than husbands, it is higher than wives due to their involvement in the meeting as head of households. The percent of participation of female heads, husbands and wives in organizing into group is 79.17%, 95.83% and 47.92%, respectively. This shows that participation among wives is

31.25% and 47.91% lower than female heads and husbands, respectively. Likewise the percent of participation of wives in decision-making role in the group is 25% and 54.17% lower than female heads and husbands, respectively. This indicates that women in general and wives in particular have less participation in community meeting, organizing in to groups and in decision making roles in the group.

Low participation of women in family package: Since the selected study district is food insecure area, family package has been offered under food security program. The most important packages are family package and minimum package. Under family package, sheep and goat breading, oxen fattening, beekeeping and poultry production are included in addition to crop production depending on the need and the available resources of the farmers. The processes involved in this program to apply family package are listed below.

First, food insecure and willing farm households are identified, prioritized and screened at KA level by DAs, development groups and KA leaders to make them beneficiaries based on annual plan. Second, training will be given by DAs to the intended beneficiaries on how to carryout family package. Third, business plan will be prepared by DAs to all intended beneficiaries based on their needs and available resources like family labour, land and forage. Fourth, after reporting the performance of these three processes to the district, the intended beneficiaries will be given credit by credit provider institutions at district based on the availability of the fund.

Table 3. Family package performance in food security program

Activities	Plan						Achievement					
	Male		Female		Total		Male		Female		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Beneficiary identification	662	74	222	26	884	100	426	79	116	21	537	100
Beneficiary Training	662	74	222	26	884	100	334	77	98	23	432	100
Business plan	662	74	222	26	884	100	426	79	116	21	542	100

preparation												
Credit users	662	74	222	26	884	100	334	83	68	17	402	100

Source: District Agriculture and Rural Development Office, 2010.

It is observed from table 3 results, the participation of women in these packages is low as compared to men. There are few female HHs, and wives are expected to participate during implementation of family package by their husbands. The ultimate goal of beneficiary identification, business plan preparation, training and credit provision is to ensure food security through family package in to practice. However family package implementation is possible only if credit is available. In this case the sole beneficiaries of family package are credit users which are 83% male and 17% female. This shows that a vast discrimination among men and women has been noticed which hinders gender mainstreaming.

Table 4. Distribution of respondents based on their participation in family packages

Participation	Female headed household (n=24)				Male headed household (n=96)			
	Scale				Scale			
	0		1		0		1	
	N	%	N	%	N	%	N	%
Organized in extension group	09	45.8	13	54.2%	27	28.12	69	71.88
Participation in family packages	18	75.0	06	25.0	44	45.83	52	50.17

Source: Survey results, 2010

Note: Scale, No = 0 Yes = 1

The low participation of female HHs in family package displayed from secondary sources is also supported by primary data which is shown in table 4. The result depicts that only 25% of female HHs has participated in family package, while it is 52% in the case of male HHs. This clearly displays that female HHs don't participate equally and hence do not have the opportunity to overcome from poverty as equally as male HHs. The reasons for low participation is

that male HHs have a significant leadership position in the community and a closer relation with the government, non-government and local organizations than female HHs to extract information and to be aware of the conditional issues. In this aspect the result of this study is similar to Thi Tien et al (2009).

Social relation with organizations*:* Social relation refers to the close contact of respondents with government, non government and local organizations as well as kinship relation. Social relation plays a part in determining an individual's power and status to pool the enabling resources, which will allow them to take greater control of their own lives. Female heads/husbands/wives who have a close relation with these institutions have opportunities to avail material and non-material benefits and also create confidence to empower themselves. Hence it is necessary to value the differences and similarities between men and women in this aspect. The analysis depicts that the percentage distribution of female heads, husbands and wives regarding social relation is 61.11%, 87.5% and 50.69%, respectively as disclosed in the table 5. This reveals that the percent of social relation among husbands is the highest of all. When social relation with government and local organization is concerned, the percentage among female heads is higher than that of wives. This is due to their participation on behalf of HHs as well as women, and their exposure to different local and governmental organizations.

Table 5. Distribution of respondents based on their social relation

Description of social relation	Female head(n=24)				Husband(n=48)				Wife(n=48)			
	Scale				Scale				Scale			
	0		1		0		1		0		1	
	N	%	N	%	N	%	N	%	N	%	N	%
Contact with and support from government organizations	10	41.67	14	58.33	8	16.67	40	83.33	28	58.33	20	41.67

Contact with and support from local organizations	8	33.33	16	66.67	6	12.5	42	87.5	27	56.25	21	43.75
Contact with and support from his/her kinship	10	41.67	14	58.33	4	8.33	44	91.67	15	31.25	32	66.67
Overall percent		**38.89**		**61.11**		**12.5**		**87.5**		**48.61**		**50.69**

Source: Survey results, 2010
Note: Scale, No = 0 Yes = 1

Only kinship is concerned, the percent is 58.33%, 91.67% and 66.67% among female heads, husbands and wives respectively. This shows that the percent is higher among wives than female heads because of their strong kinship in both sides that is with their family and their spouses' family. The close contact with and support from kinship, local organization and governmental organization facilitates information exchange and awareness creation that help husbands to investigate options and use opportunities. This creates a gap between men and women which hamper mainstreaming.

Intra Household Violence: Violence in this study is expressed in terms of fear about lack of shelter, threat from spouse, words of abuse and reproach from spouse. Violence prevails not only among wives but also husbands and the violence faced by husbands from their spouse is expressed in terms of threat for divorce and leaving the husband along with their children. The consequence of violence is primarily disempowerment of women.

The table 6 indicates that the overall mean on intra household violence among husbands and wives is 0.247 and 0.319, respectively; implying that violence among wives is relatively higher than husbands and they tend to suffer violence at the hands of their spouse more often than men. However, violence average lies between never and sometimes

for both wives and husbands. The result of T-test shows a significance difference in threat from spouse, fear of lack of shelter, private spending of common money by the spouse and fear of confiscation. These are serious risks faced by wives and this violence creates a gap in empowerment and inhibits their confidence. Similarly, the study under taken by Muhammad Zekerya (2005) showed that 59.6% of husband respondents used words of abuse against their wives but 7.6% of the wife respondents reproach their husband. However wife respondents never used threat for divorce, which might be due to customary, and religion that woman once married should tried utmost to save her marriage and home.

Table 6. Distribution of respondents based on intra household violence

Types of violence	Husband(n=48)		Wife(n=48)		T-Test
	mean	SD	mean	SD	
Fearing beat from spouse	0.021	0.144	0.149	0.416	-1.997***
Fearing threat from spouse	0.146	0.412	0.426	0.903	-1.936***
Spouse spent most of the money for him/her self	0.167	0.377	0.292	0.713	-1.074**
Fear about lack of shelter	0.167	0.519	0.479	0.945	-2.008***
Words of abuse from spouse	0.313	0.624	0.396	0.765	-.585
Reproach from spouse	0.375	0.672	0.354	0.699	0.149
Threat for divorce from spouse	0.396	0.765	0.25	0.668	0.995
Threat for confiscation of property from spouse	0.396	0.792	0.208	0.651	-1.292***
The over all mean	**0.247**		**0.319**		

Source: Computed from survey data, 2010.
Note: The scale used for this computation, Never=0, Sometimes =1, Often=2, Always=3
** and *** are significant at less than 5% and 1% level respectively.

Free Time Availability: Free time means the availability of extra time without any engagement for the respondents to

use extra-intended activities. Free time availability determines the participation of female heads/husbands/wives in social and political affairs that increase consciousness on the ongoing issues and changes to adjust themselves. The table result (7) indicates that the over all mean of the availability of free time among female heads, husband and wives is 0.89, 1.11 and 0.95 respectively which shows that husbands have relatively higher available free time than female heads and wives.

Table 7. Distribution of respondents based on their extent of free time availability

Free time availability	Female head(n=24)		Husband(n=48)		Wife(n=48)	
	mean	**SD**	**mean**	**SD**	**mean**	**SD**
Have rest time in the morning	0.375	0.576	0.458	0.683	0.396	0.707
Have rest time between morning & mid day	0.25	0.532	0.25	0.526	0.479	0.652
Have rest time at the mid day	1.042	0.908	1.083	0.895	1.063	0.727
Have rest time between mid day and evening	0.417	0.83	0.375	0.841	0.458	0.617
Have rest time in the evening	1.00	1.063	1.917	1.127	1.063	0.976
Have rest time at night	2.25	1.225	2.604	0.917	2.271	1.180
Over all mean	**0.89**		**1.11**		**0.95**	

Source: Computed from survey data, 2010.
Note: The scale used for this computation is Never=0, Sometimes=1, Often=2, Always=3

The reason is that in addition to their productive role played in the household, they spend their time for unpaid family duties such as nourishment, care of children and other dependents like elders and patients. There is also social obligation for their neighbors with out which private life is difficult. However, shortage of time for female heads is higher as compared to wives because of their additional role on behalf of household. Husbands have better free time as

compared to female heads and wives and this enables them to move freely and adjust their time for economic, social and political issues. Whereas, unavailability of free time prevented wives' participation in political, social and economic development activities becoming one of the impediments for gender mainstreaming.

Freedom of Mobility: Freedom of mobility implies the extent to which the wives/husbands can move freely independent of their spouses' permission. The participation of the wives/husbands in developmental, social and political affairs, and the awareness of technological changes and recognizing economic options are affected by the extent to which the wives/husbands are free to move without restrictions that leads to empowerment.

Table 8. Distribution of respondents based on their extent of freedom of mobility

Freedom of mobility	Wife(n=48)		Husband(n=48)		T-Test
	Mean	SD	Mean	SD	
To go out of the home stead to do work	1.021	1.194	0.247	0.538	-.264
To go to market	0.813	1.179	0.141	0.22	-.897**
To attend community meeting	0.833	1.117	0.02	0.048	-1.122
To participate campaign work	0.688	1.188	0.604	0.869	-.500***
To go anywhere they need	1.063	1.192	0.583	0.821	1.828**
The over all mean	**0.883**		**0.319**		

Source: Computed from survey data, 2010.
Note: The scale used for computation is, Never = 0, Sometimes =1, Often = 2, Always=3

** and *** are significant at less than 5% and 1% level, respectively.

The table 8 shows that the overall mean of extent of freedom of mobility among husbands and wives is 0.319 and 0.883, respectively. This depicts that wives are tightly held and more restricted from mobility by their spouse where as husbands are not restricted that much. Even though husbands and wives are expected to be dependent on each other for some of their mobility, in reality wives are restricted from mobility mostly due to their spouse. But husbands, in most cases their mobility is not restricted by their spouse. Even their request of permission from their spouse can be regarded as information giving. This result is confirmed with Mehra et al (2008) states as unequal rights and obligations within households and societies impose restrictions on women's time use and availability, which can undermine their efficiency and productivity due to multiple responsibilities and time conflicts as well as fewer long-term human capital investments, such as education. This disparity in freedom of mobility left wives to remain around their homestead that hides options and opportunities for their personal development by inhibiting their participation and exposure to development initiatives.

Cultural Constraints: Cultural constraints may be different depending on the society. However it is essential to identify cultural biases that lead to inequitable situations for men and women. In this study cultural constraints are expressed indirectly in terms of inability to attend and act along with spouse or behalf. The hidden barriers are the acceptance of men dominance, dependence on spouse, shyness and abstinence by the community. The extent of cultural constraints in this study is measured in terms of whether the respondents can act and attend along with spouse and behalf out of their day-to-day activities like meetings. This is verified by the response of respondents and categorized as never/sometimes/often/always.

Table 9. Distributions of respondents based on the extent of cultural constraints

Means of verification	Husband(n=48)		Wife(n=48)		T-Test
	mean	SD	mean	SD	
Attend community meeting instead of his/her spouse	2.667	0.724	0.771	0.857	9.192
Attend community meeting along with spouse	1.229	0.881	0.813	0.641	2.650**
Forward ideas in the community meeting that he/she attended along with his/her spouse	1.583	1.069	0.708	0.824	4.492***
He/she goes to government institutions to execute issues instead of his/her spouse.	2.375	0.937	0.667	0.883	11.709
The overall mean	**1.964**		**0.74**		

Source: Computed from survey data, 2010
Note: **, and *** are significant at less than 5% and 1% level, respectively.

The table 9 reveals that the overall mean of extent of cultural constraints among husbands and wives is 1.963 and 0.739, respectively. This indicates that there is huge difference in cultural influence between husband and wives. Wives face cultural barriers in attending community meeting on behalf of the household when ever their spouse is present around the area, to attend with their spouse, to forward ideas in meetings and to execute their issues behalf of the household. This is due to the misunderstanding of the representation of husbands as HHs, and lack of exposure to make contact

with government institutions and to forward ideas in community meetings. Those wives whose spouse is elderly, patient, handicap or migrate found to have better exposure to make a contact with government institutions and to forward ideas in community meeting than other wives. This is because, being better of their spouse, they participate extensively in most development activities behalf of head of households and themselves as well.

B) Prospects for gender mainstreaming

In addition to impediment, prospects have also been assessed to ensure whether there is a room to mainstream gender in agricultural extension. Even though there are impediments to be addressed, the existence of gender facilitators, different women organizations, female health extension workers and a considerable number of development groups as well as KA's council bring back brightness for gender mainstreaming provided that integrated work management related to agricultural extension issues at district and KA level is enhanced.

According to District Office of Women Affairs, women's issues are being addressed through women affairs office, women association and women league in their structure that reaches to the village level. To bring gender mainstreaming in to practice, different attempts are made in 2010 which includes provision of gender education to women and men, conducting training on gender mainstreaming and gender analysis to job process leaders, establishment of women federation with its own 7 leaders and selection of gender facilitators in all KAs. The function of gender facilitators and its relation to the function of DAs are stated in table 10.

Table 10. Functions of gender facilitators at village level

Description of activities at village level	Relation to the function of DA's
Documentation on women affairs	To some extent related

Organizing women	Related
Initiating organized women to income generating activities	Related
Identifying and avoiding harmful traditional practices	Related
Education and awareness creation on harmful practices	Related
Initiating women to accomplish health packages	Un related
Initiating women to homestead development in vegetable production	Related
Initiating pregnant women to HIV/AIDs examination	Un related
Initiating women to income generating activities such as pottery,	Related
Increasing the number of members	To some extent related
Helping discriminated women to get legal protection	Un related
Integrating and coordinating women leaders with other organization leaders in various tasks.	To some extent related
Initiating women to send their school age children to school.	Un related
Initiating women to use family planning.	Un related
Strengthening women leaders' role	To some extent related
Initiating women to discussion on current issues	Related
Awareness creation to child care	Un related

Source: District Office of Women Affairs, 2010.

As table 10 indicates, 41.17%, 35.29% and 23.54% of the function of gender facilitators is related, unrelated and to some extent related, respectively, to the function of DAs. This implies that as far as most of the function of gender facilitators is related, they have opportunities to contribute more to gender mainstreaming in agricultural extension. The only requirement for its valuable contribution is the presence of harmonization between DAs and gender facilitators.

Table 10 also depicts that the participation of women in village council and development group is relatively comparable even though equality in this aspect is not so far achieved. If this participation of women at grass root level is strengthened further, there is a possibility of incorporating gender issues in any agenda of the village council. As discussed earlier, majority of the women are organized in development groups. But their participation as group leader is almost negligible. Group membership is an opportunity to bring women into leadership position through repeated awareness creation to incorporate gender issues in all agricultural extension initiatives for the realization of gender mainstreaming. This can be taken as one component of the opportunity to mainstream gender in agricultural extension.

It is observed in the study area that women issues are being addressed through women affairs, women associations and women leagues through their structure that reaches to the village level. These structures directly or indirectly encourages the involvement of women in different meetings, conferences and elections and improves the exposure to explain ideas in community meetings, to understand conditional and changing issues as well as realize themselves that creates sense of ownership in all development initiatives. This is an opportunity for gender mainstreaming in agricultural extension also. The only requirement for this valuable role is strengthening these structures and provision of a wide range support through integrated work management.

From the commitments of Ethiopian government to achieve Millennium Development Goals in health sector, two female health extension workers are assigned at each KA for early prevention of diseases, family planning and mother and child health care. Due to the nature of the service, these workers are closer to women than any other sectors. Because they share the private life related to delivery service and family planning. This close relation is helpful to address women in gender related issues in agricultural extension also provided that there is an integrated work management at district and village level.

III. Comparison of Access and Control over Resources between Men and Women

One of the objectives of this paper is to compare the access and control over resources between female heads, husbands and wives rather than comparing between female and male HHs, not to over look wives whose condition is different from female heads. However before comparison, it is essential to consider the resource endowment at household level on which comparison of access and control over resources depends.

Table 11. Average resource holding per household

Resource type	Female HHs				Male HHs				T-Test
	Min	Max	Mean	SD	Min	Max	Mean	SD	

Irrigated land(hectare)	0	0.25	0.01	0.05	0	1	0.06	0.15	-2.911***
Cash crops(quintal)	0	5	0.75	1.51	0	12	0.73	1.55	0.059
Food crops (quintal)	1	13	5	2.99	0	20	8.49	4.78	-4.469***
Equines(in TLU)	0	3.2	0.35	0.75	0	5.4	0.87	0.97	-2.439*
Cattle(in TLU)	0	3	0.61	0.93	0	5	2.19	1.38	-6.678**
Poultry(in TLU)	0	0.1	0.02	0.03	0	0.13	0.03	0.03	-1.206
Beehives	0	8	0.5	1.79	0	10	0.42	1.4	0.245
Corrugated iron roof house	0	2	0.54	0.59	0	1	0.6	0.49	-0.48*
Grass thatched roof house	0	2	1.04	0.46	0	3	1.13	0.55	-0.757
Stored grain(in quintal)	0	6	0.83	1.49	0	8	1.92	2.22	-2.875**

Source: Computed from survey data, 2010.
Note: *, **, and *** are significant at less than 10%, 5% and 1% level, respectively
TLU – Tropical Livestock Unit

Resource endowment has a direct impact on men and women to build life-enhancing livelihood strategies. Understanding difference in resource endowment can inform the focus areas of access and control to be addressed in improving the livelihoods of both men and women. As the livelihood of the respondents is predominantly agriculture, the most important agricultural resources are land, food crops and livestock. The table 11 shows that there is a significance difference between male HHs and female HHs in irrigated land holding, food crop, equine, corrugated iron roof house and stored grain. Female heads have relatively less resource endowment compared to men. This hinders women to increase opportunities and enhance their vulnerability.

12. Distribution of respondents based on extent of their access to resources

Resource endowment	FHHs(n=24)		Husband (n=48)		Wife (n=48)	
	mean	SD	mean	SD	mean	SD
Land holding	1	0	0.979	0.144	0.958	0.202
Irrigated land	0.042	0.204	0.229	0.425	0.188	0.394
Land managed by holder	0.708	0.464	0.938	0.245	0.917	0.279
Share cropping out	0.333	0.482	0.125	0.334	0.063	0.245
Share cropping in	0.083	0.282	0.25	0.438	0.167	0.377
Cash crops	0.208	0.415	0.5	0.505	0.229	0.425
Equines	0.292	0.464	0.625	0.489	0.625	0.489
Cattle	0.458	0.509	0.917	0.347	0.917	0.279
Milk product	0.167	0.381	0.521	0.505	0.625	0.489
Sheep and goat	0.417	0.504	0.792	0.771	0.667	0.476
Poultry	0.542	0.509	0.708	0.504	0.646	0.483
Poultry product	0.208	0.415	0.604	0.494	0.625	0.489
Beehives	0.042	0.204	0.188	0.394	0.146	0.357
Bee product	0.042	0.204	0.229	0.425	0.125	0.334
Farm implements	0.125	0.338	0.729	0.449	0.771	0.425
Grass thatched roof house	0.917	0.282	0.917	0.279	0.917	0.279
House corrugated iron roof	0.542	0.509	0.938	1.262	0.667	0.476
Kitchen utensils	0.833	0.381	1.125	1.178	0.938	0.245
Tools	0.833	0.381	1.146	1.167	0.938	0.245
Stored grain	0.417	0.507	0.667	0.476	0.542	0.504
Saved cash	0.04	0.204	0.064	0.245	0.063	0.245
Seed	0.625	0.495	0.875	0.334	0.938	0.32
Fertilizer	0.125	0.338	0.5	0.505	0.688	0.512
Irrigable water	0.042	0.204	0.229	0.424	0.125	0.334
Credit	0.125	0.338	0.458	0.504	0.188	0.394
The overall mean	**0.352**		**0.587**		**0.526**	

Source: Computed from survey data, 2010.

Note: **Scale used for computation, No = 0 Yes = 1**

*Access to Resources: Access to resource is a right of respondents to use material and non material resource benefits. Access to resource plays an important role in improving the engagement of female heads/husbands/wives to invest in different economic activities, reduce the financial constraints, save their time, increase their efficiency and productivity and solve their problems***.**

Table 12 shows that the over all mean of female heads, husbands and wives is 0.352, 0.587 and 0.526, respectively which indicates that female heads are the least in access to resources. Specifically, they have very less access to irrigable land, share cropping in, beehives, bee products and farm implements. Because they have no means of compensation as husbands and wives can compensate each other for the resource on which one of them doesn't access. This implies that female heads don't have access to key productive resources. This less access to productive resources is one of the obstacles for female HHs to use extension services effectively. Wives have better access to resource as compared to female heads. However the husbands are the best in having access to resources as compared to both female heads and wives.

Control over Resources: Control over resource means the commanding power of the respondents over resources to organize, manage, run and use as per their intention. Female heads/husbands/wives, who have control over resources, have opportunities to determine technological options and rewarding economic activities. Therefore, it is necessary to understand whether the available resources are in a way that ensures the greatest benefit for all female heads, husbands and wives equally.

The survey results shows that the overall mean of female heads, husbands and wives is 1.518, 1.12 and 1 respectively and the overall mean lies on nearly exclusive control for female heads, between joint control and exclusive control for husbands, and joint control for wives. However female heads have less control over irrigation water, bee product, land from share cropping in and irrigated land as

they had less access to these resources. The only resources over which husbands have the least control ranging from no control to joint control are kitchen utensils, poultry products and milk products. Because these resources are not economically rewarding and husbands' control over these resources is not appreciated culturally in the community. Other resources are tightly controlled by husbands ranging from joint control to exclusive control. In general despite their less access to resources, female heads have the highest control over resources what they have access to because their control over resources is mostly exclusive. On the contrary even though wives have more access to resources than female heads, their control over resource is the least. Specifically, wives have less control over beehives, bee products and irrigation. Likewise, Wude (2005), Reshid Abdi (2004) and Trinh Thi Tien and Ha Thuc Vien (2009) found similar result in their studies.

IV. Analysis of Gender Gaps between Men and Women with reference to Decision Making Authority

The study examined the gender gap in terms of differences between the roles that female heads, husbands and wives play, the decision making power they hold, constraints and opportunities due to their difference in roles and decision making powers. Because decision-making power is resulted from the role they play and affect the recognition and access to benefits that leads to empowerment in decision-making.

A) Decision Making Authority of Households

Decision-making authority is a creative and enabling power to prioritize and solve problems as well as to determine alternatives. Female heads/ husbands/wives who play the front line role in decision making have the opportunity to determine internal and external, social and economic activities and obviously it affects the extension practices.

Table 13. Distribution of respondents on extent of their decision making power

Type of decision	Femalehead(n=24)			Husband(n=48)			Wife(n=48)		
	mean	SD	RO	mean	SD	RO	mean	SD	RO
Decide on what to plant	2.5	1.268	16	2.354	0.812	1	0.917	0.739	16
Decide on what input to use	2.401	1.285	18	2.083	0.919	3	0.708	0.651	20
Decide on how much input to use	2.409	1.285	18	2.229	0.881	2	0.688	0.624	21
Decide on how much of the product to sale	2.583	0.974	14	1.583	1.127	14	0.792	0.824	17
Decide on at what price to be sold	2.583	1.018	14	1.458	0.967	16	1.229	3.171	6
Decide on how much of the product to be consumed	2.875	0.448	6	1.333	0.907	18	1.708	3.128	1
Decide on how to use the store	2.708	0.806	13	1.167	0.907	20	1.396	0.917	3
Decide on how much credit to use	2.273	1.347	20	1.436	1.07	17	0.771	0.751	18
Decide on what technology to use in production	2.429	1.262	17	1.587	1.066	13	0.771	0.692	18
Decide on hiring labor force	2.118	1.474	21	1.725	1.132	7	0.55	0.504	22
Decide on managing the labor force	2.826	0.859	8	1.771	1.016	5	1.229	0.831	6
Decide on Production investment	2.826	0.859	9	1.708	0.988	8	1.146	0.772	11
Decide on allocation of income	2.917	0.408	1	1.625	0.959	10	1.417	0.821	2

Decide on HH's financial management	2.917	0.408	1	1.604	0.962	12	1.1087	0.568	12
Decide on purchasing food	2.917	0.4083	1	1.625	0.959	10	1.375	0.895	4
Decide on family planning	2.792	0.721	10	0.813	0.641	21	1.167	0.93	9
Decide on children education	2.913	0.721	4	1.333	0.808	18	1.271	0.818	5
Decide on social activities	2.913	0.721	4	1.479	0.922	15	1.229	0.722	6
Decide on house building	2.833	0.565	7	1.667	0.953	9	1.167	0.724	9
Decide on properties management	2.792	0.721	10	1.917	1.007	4	1.021	0.601	15
Decide on asset building	2.792	0.721	10	1.771	1.036	5	1.063	0.697	14
The overall mean	**2.682**			**1.632**			**1.082**		

Source: Survey results, 2010.

Note: Scale used for computation, Never= 0 Sometimes = 1 Often = 2 Always = 3

Table 13 indicates that the overall mean related to decision-making power of female heads, husbands and wives is 2.682, 1.6319 and 1.0819, respectively. It means that the decision making authority of female heads lies between often and always indicating that they have more exclusive decision making power for what they have intended. This is due to the fact that they are the only responsible body to make decision as HHs. The decision making authority of husbands lies between sometimes and often indicating the little room left for their spouses to decide on. Because husbands take the decision making authority on most of rewarding agricultural

issues. The decision-making authority of wives almost lies on sometimes indicating the wide room left for their spouses to decide on willingly or unwillingly. Even though the decision making power of husbands is higher than wives, it is less than female heads because of some share in decision making between their spouse. Because the decision making power among husband in this case is reduced from exclusive decision maker (always in the scale) to joint decision maker (sometimes in the scale). Decision-making power of wives on most of productivity determinants that require extension service is found to be less than husbands and female heads. This includes what to plant, what inputs to use, how much inputs to use, how much of the product is to be sold, how much credit to use, what technologies to use and hiring labour forces which are the priority areas of husbands. Wives' priority is found to be how much product to be consumed, allocation of income and how to use the stored grain as indicated in the rank order (RO).

This study is confirmed with the results of Addis et al (2001) stated that among female HHs, the decision to grow improved wheat varieties was always made by the head, while in male HHs it was either a joint decision between the head and the wife (55.6%) or a decision by the head alone (44.4%). This low decision making power of wives slow down their extensive participation in extension and create high disparity between men and women.

B) Role of households in Productive, Reproductive and Community Work

To analyze the gender gaps between men and women, it is not sufficient enough to depend on decision making power of the households alone. Much decision making power authority arises from the role since it is the role they play enforced women to spend most of their time, to hold back around the homestead and create dependence on men for other roles. In realization of gender mainstreaming, the transformation of gender role is vital. Identifying the gender role transformation is

a good implication for prospect of gender mainstreaming and to recognize the obstacles faced, the future challenges and opportunities. Transformation of gender role may include the encouragement of men to share unpaid labour of women and the encouragement of women to share traditionally delivered responsibility of men. The role played by the female heads /husbands/wives affects the recognition and access to benefits that lead to empowerment. This can be justified by insuring whether their most engagement and the time they spent on is rewarding or not.

The analysis result shows that the overall mean of the role in the households among female heads, husbands and wives is 2.2, 1.463 and 1.546, respectively. It indicates the role that female heads play is highest because of dual responsibility (as men and as women) in reproduction, production and community works. Ploughing, sowing, threshing and cutting grasses are the roles played by female HHs at lower level. Sweeping the house, cleaning the cattle shed, cleaning utensil, cooking and decorating the house are found to be played rarely by husbands indicating that there is slow and little transformation of gender role. The role of wives in weeding and collecting the harvested crop in to trashing area found to be greater than husbands. But in other economically rewarding activities such as selling the crop products, livestock purchase, selling goat and sheep, their role is less than husbands and female HHs. This is due to domination of wives by husbands. The role of female heads is shown lower than wives only in ploughing. Even though ploughing is culturally unacceptable for women in the area, the group discussion made with women found that wives adapted ploughing when their spouse is eating their lunch at the field. But to complete the whole ploughing practice, women face cultural abuse of being named as hermaphrodite or genderless by the community. This study is confirmed with Almaz (2007) study findings that land is ploughed by husbands in most married households. Female HHs face labour constraint in absence of adult male labour in their households and the cultural taboo in women's ploughing.

V. Assessment and Comparison of Extension Service Opportunities between Men and Women

This study attempts to assess and compare the extension service opportunities in terms of extension contact, extension utilization and client satisfaction on extension services. This is essential to identify the extension service delivery that leads to discriminatory out comes for men and women which is also an important element of gender mainstreaming.

Extension Contact: As the frequency of the number of contact with DAs increases, the availability of information about new technologies and improved practices will also increase and vis versa. The extension contact of respondents is found to be different across different age groups in cross tabulation. Extension workers visit 45% - 80% of the age groups of above 25 years old for 1-2 times a month, while only 30% of those less than 25 years old gets this opportunity. The reason is that DAs use influential elder farmers to scale up the intended intervention to other farmers. So they have frequent contact with elder farmers than young farmers.

Table 14. Distribution of respondents based on extent of extension contact

Extension contact	**Female head(n=24)**		**Husband(n=48)**		**Wife(n=48)**	
	mean	**SD**	**mean**	**SD**	**mean**	**SD**
They are visited by agricultural extension workers	2.167	1.239	3.542	0.743	1.98	0.1
They are visited by health extension workers	3.5	0.722	3.146	0.412	3.375	0.733
Over all mean	**2.833**		**3.344**		**2.678**	

Source: Computed from survey results, 2010

Note: Scale used for computation, Once per three or more months =1, Once per two months = 2, Once per month = 3, Twice or more per month=4

A comparison was made between DAs and female health extension workers to know to which group their

frequent visit belongs and which extension workers addresses both male and female farmers. The overall mean of female heads, husbands and wives is 2.833, 3.343 and 2.677, respectively. This means that husbands have more extension contact with both agricultural extension workers and health extension workers as compared to wives and female heads. Also both female heads and wives have more extension contact with health extension workers than agricultural extension workers due to the nature of their package, extension service, maternal service and vaccination focusing more on women. Group discussion with development agents found that even though DAs have a contact with cells twice per month and with development groups once in a month, it depends not only on DAs but also on development group members in attending the meeting. However, the extension contact includes home and farm visit. Both female heads and wives have less extension contact with agricultural extension workers. Because one hand the existence of misunderstanding of representation of male as HHs and on the other hand the number of women leaders in the cell is insignificant to strengthen the benefit of women from extension contact in the development group. This study is confirmed with other empirical evidences, Mahlet (2005), Edilu (2006) and Belay (2003) also.

Extension Utilization: Now days the government of Ethiopia gives attention to the number of DAs available in each village to make extension service accessible to all male and female farmers. However accessibility is an opportunity which doesn't imply utilization. Therefore it is important to investigate the extent to which the respondents used these opportunities to utilize extension services. Extension utilization is explained and compared in terms of the respondents' exposure to DAs' contact, extension group organization, visiting different improved technologies and practices, training and different package applications. The opportunities for female heads, husbands and wives in having contact with and visit from DAs, dissemination of information, extension education and training are compared. In addition, demonstration, visiting improved practices and technologies from farmers training centers and model farmers, extension package planning, implementation

and evaluation of cost effectiveness and achievement in the ultimate production objectives.

The survey results shows that the overall mean of female heads, husbands and wives regarding extension utilization is 0.567, 0.765 and 0.512, respectively. This shows that husbands have more extension utilization than female heads and wives. Wives have less extension contact, less visited and less trained. This is due to the fact that they are restricted from mobility and also they miss meetings and trainings called for HHs. This result is confirmed with Mehra and Mary Hill Rojas (2008) idea that describes as women farmers have less contact with extension services than men, especially where male-female contact is culturally restricted. This disparity makes gender mainstreaming difficult.

Satisfaction on Extension Services: Extension service is one of the public services provided to the farmers to help them transform their subsistence agriculture to market oriented by introducing new improved technologies and practices. The need for assessing extension service satisfaction related to gender is to recognize how far the service is benefiting both men and women equally and provides opportunity to all.

Table 15 indicates that the overall mean of extension service among female heads, husbands and wives is 0.847, 1.0625 and 0.701, respectively. This means that husbands are more benefited than female heads and wives in extension service because of their high participation and involvement in extension group organization. Also wives have got the least extension services expressed in terms of information dissemination, training and advisory services as compared to female heads and husbands. The male-oriented extension system also mostly hold back from contacting and working with women as a farmer due to cultural barriers (contacting with women is unwanted but not restricted) in the rural areas. In addition, DAs' intention to scale up better practices and technologies to other farmers divert their attention to acknowledged farmers rather than tending equal focus towards men and women. In general, satisfaction on extension service among female heads and wives is less than husbands. Whereas husbands have got better satisfaction (in average above inadequate) on extension services.

Table 15. Distribution of respondents based on their satisfaction on extension services

Type of extension service	Female HHs (n=24)		Husband(n=48)		Wives(n=48)	
	mean	**SD**	**mean**	**SD**	**mean**	**SD**
Information dissemination	0.708	0.859	0.875	0.937	0.729	1.005
Agricultural training	0.75	0.944	1	0.9	0.625	0.914
Advisory service	1.083	1.100	1.313	0.879	0.75	0.934
The over all mean	**0.847**		**1.063**		**0.701**	

Source: Survey results, 2010.
Note: Scale used for computation, Not provided=0, Inadequate=1, Satisfactory=2, More satisfactory=3

6. Conclusion and Recommendations

Despite of the necessity of utilizing untapped potential of men and women, failure to address gender based differences bring about disparities in development out comes in general and in agricultural extension in particular and makes women more marginalized. Thus it requires addressing gender issues in multi dimension of the development activities. This study clearly points out existence of gender disparity in access to and control over resource, extension opportunities, social relation, participation, mobility, free time availability and extension contact in three rural villages in Mekedela district of Amhara region. Contributing factors to women's inequalities need to be addressed effectively to ensure women's equality so that gender mainstreaming can be achieved in agricultural extension in the study area. Therefore the following recommendations are wise and drawn from the study to mainstream gender in agricultural extension.

- The existing cell based structure used as extension communication media is also a media for other sectors. This will create work dilution and information loading on

the side of cell leaders and development group leaders. Thus there should be a structure needed exclusively for extension.

- Reorganization of the cells to improve the participation of women should be considered.
- Experts and DAs should update with gender-related skills, knowledge and commitment to convince local political leaders and create extension service demand on the side of the farmers.

- Both female heads and wives have better extension contact with health extension workers than agricultural extension workers due to the nature of their service delivery. This calls for integration of agricultural extension workers with health extension workers at village level.

- Female heads are the least of all in attaining their production objective because of their least access to productive resource. Therefore promoting income generating activities that strengthen access to productive resources should be given due attention.
- Equal share should be exclusively given to women in any planned activity and the performance should be evaluated based on the data disaggregated by sex and the participation only should not be considered as an indicator for gender mainstreaming.
- Attention should be given to strengthening all types of women organizations to increase wives' access to and utilization of extension services

Gender mainstreaming in agricultural extension requires strengthening women electors and making them the leading role player in each development initiatives. Therefore reviewing the regional extension policy to integrate agricultural extension with women leagues, women organization, village women affairs representatives, gender facilitators and health extension post, and using them as media through which agricultural extension message transmitted is essential.

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