CHAPTER I

INTRODUCTION

This chapter gives an overview of the study on women's empowerment contribution to agricultural development in Nawalparasi District. The background on Nawalparasi District will be presented besides presenting a problem statement regarding women participation in agriculture. The study objectives and methodology will also be highlighted.

1.1 Background Information

Nawalparasi district is located in the western development region of Nepal more over it is also lies in middle part of the Nepal from east to west. Kawasoti VDC, is the one of the develop VDC in Nawalparasi District, but it is not well develop in remote area where most of the people are ethnical and Tribal group are live there. They are not able to take competition with other group which comes from other part of Nepal. Most of the tribal houses are male headed households. They are poor in education economic, health condition social relation. Furthermore females are dominant by their husband for decision making process and market oriented agriculture. The land locked country, relies heavily on agriculture which is the backbone of the country's economy and contributes huge to the GDP. About 80% of the country's population derives their livelihoods from agriculture. A household is considered poor if its annual per capita consumption expenditure is below the poverty line which is currently expressed in an equivalent of US\$ 1.25 per day. Furthermore, it can be manifested through deprivation of basic needs like food, income, water, healthy services and even education and currently 39% of the population are poor (UNDP, 2010).

Agricultural development has been adopted as a strategy to achieve poverty reduction, the first of the millennium development goals (MDG). Gender inequalities continue to contribute towards the decline of agriculture in most parts. Women continue to play a vital role in agricultural development hence the need to recognize their contribution and enhance their capabilities to improve on agricultural productivity. Women constitute higher number of full time farmers besides contributing over 70% of agricultural labor in Nawalparasi District.

Davison's (1992) found in a study in Zomba that women do more production tasks than men.Despite their contribution to agriculture; women have not benefited much from their labor. Access to and control over productive resources such as land still continues to be a major set-back for women farmers, limiting their ability to effectively practice sustainable agricultural development. Gray and Kevane (1999) noted that the increase in value of land

especially with the emphasis on cash crops has put women at a disadvantage. They have tended to have little influence on decisions on market oriented enterprises. Apart from access and control over benefits, inequalities in terms of access to and control over factors of production limits women's participation in meaningful agriculture. Land is one of the limiting factor for women especially smallholder farmers. The significance of having access to and control over land cannot be overemphasized as argued by Allendorf (2007) that land is a major source of livelihood, power and control. The limiting factors to women's participation in agriculture affects, the general output from the sector. Longwe& Clark (1994) argued that women should be active participants in agricultural development to enhance their own capacities and overcome their challenges. In view of lack of recognition of women's contribution towards agriculture development, efforts need to be drawn towards social changes that enable them to actively participate in the process so that their input is duly recognized.

Nawalparasi District is signatory to most of the global and regional agreements that aim at reducing gender inequalities or the marginalization of women. Nawalparasi District strives to achieve the millennium development goals that were set to spearhead development initiatives across the globe. In response, the country developed multiple policies to localize the MDGs. To some extent, the development of such policies has been under political influence resulting in lack of continuity in some policies with new ones coming with change of governments and some are never translated into consistent policy implementation (Booth et al, 2006). For instance, the country still has the vision 2020 which was meant to guide development till 2020 but rarely is it referred to of late.

1.2 Statement of the problem

Women continue to play a vital role in agricultural development despite their contribution in most cases being unnoticed. Despite their significant contributions especially on labor, they have not been fully integrated into many agricultural programs. In other areas as noted by Safilios-Rothschild (1985) where societies sustain rigid male supremacy, women's work and economic contributions tend to be viewed as nonessential and are regarded as assisting men. However, there has been an increase in female headed households who derive their livelihood from agriculture which challenges the notion that agricultural production is a male occupation. The labeling of agricultural production as a male activity has resulted in women facing challenges in striving to make ends meet in agriculture. Access to and control of

productive resources like land, farm equipment and inputs is male dominated. Therefore, sustainable interventions towards addressing women's practical and strategic needs are significant. Women being an important stakeholder in agricultural development need to be equipped with all the necessary capacity to enable them contribute effectively. This study provides a clear understanding of limitations in fostering agricultural production due to non-involvement of the major stakeholders, the women farmers. Women's lack of power over factors of production despite contributing over 70% of labor would have an effect in achieving the millennium development goal on poverty reduction. Addressing the challenges of women in agriculture is vital since it is the major strategy in reduction of poverty as they make up the majority of people living in poverty. Therefore, women need to be empowered especially on access and control over factors of agricultural production to which they are the major stakeholder. This study therefore, creates a clear understanding on the structures and institutions that prohibit women's contribution and policy implementation.

1.3 Study Objectives

The major objective of this study is to assess the significance of women's empowerment in agriculture especially smallholder farmers in the rural areas. These objectives are achieved by specifically looking at the following objectives:

- 1. To assess influencing factors of women's participation in agricultural development.
- 2. To assess policy initiatives on addressing women's participation in agriculture.
- 3. To examine the way of women empowerment in agriculture development.

1.4 Research Questions

Research question	Major areas to explore			
What is the significance of Women	What are the current levels of participation of			
participation in agriculture	women in agriculture in Nawalparasi District			
development?	across the value chain?			
	What are the barriers to women participation			
	in Nawalparasi District across the value			
	chain?			
	Which national policies restrain women's			
	participation in Agriculture?			
	What can policies do to provide enabling			
	environment to women's participation?			
	How do international Policies influence			

women's Participation?

1.5 Methodology

The study was based on secondary data and adequately utilized the literature that was already available. Relevant sources from journals, articles, academic literature, reports, policy documents, conventions and laws were reviewed by critically assessing the diverse issues that are in line with women's participation.

1.6 Organization of study

The paper has been divided into 6 chapters with the introduction giving a background of the study and the country in which the study is based. The chapter further outlines objectives and the methodology of the study. The second chapter reviews literature on women's involvement in agriculture in broader perspective. The chapter shows the differences in context at all levels whether global or regional.

Chapters three and four are continuation of chapter two but with focus on Nawalparasi District. They analyze the situation in the Nawalparasi District in context of women's participation and extent of policy response to reduce inequalities in agriculture.. Chapter five discusses chapter one and two and the last chapter gives conclusion and recommendations which demonstrate the need to empower the woman.

CHAPTER II

LITERATURE REVIEW AND CONTEXT ANALYSIS OF WOMEN AND AGRICULTURE IN NAWALPARASI DISTRICT

2.0 Chapter Introduction

This chapter aims to review literature on women's participation in agricultural development. Emphasis will be on access to and control of productive resources and benefits from agricultural production and relevant services. Furthermore, women's participation in decision making will also be reviewed. The section also explores the global responses towards addressing gender inequalities that impede integration of women in agricultural development.

2.1 Women's Empowerment: Theoretic Perspective

Different writers have described women's empowerment in various ways but all point towards one direction which is the assumption of power or ability by women to address their needs. For instance, Longwe& Clark (1994) perceives it as a means to overcome barriers to women's equality with men especially in patriarchal societies. For instance, Safilios-Rothschild (1985) attributed women's invisibility in agriculture to patriarchal values that rigidly sustains powerful male supremacy. According to Mayoux (2000) women assuming the ability to identify their aspirations and strategies for change besides gaining skills and resources to achieve these aspirations constitutes their empowerment. In addition, women's empowerment is viewed as a process that increases women's choices or ability to makes choices about their life and the environment they live in (Allendorf, 2007; Mehira, 1997; Kabeer, 1999).

Aspirations or needs that women strive to achieve have been classified into two categories by Moser who developed a framework for analyzing these needs. The categories are practical and strategic gender needs which arise from inequalities that exist between men and women. Societies prescribe gender roles based on sex hence the condition of the people arising from the gender division of labor result into practical gender needs (Taylor, 1999). According to March, Smyth, &Mukhopadhyay (1999), Moser argued that women and men differ in terms of their needs as two different gender groups due to the subordinate

position of women. The subordinate position of women limits their ability to effectively indulge in socioeconomic activities. These limitations are what Moser terms strategic gender needs.Importantly, as Percy (1999) argued, differences also exist within women themselves since they are not a heterogeneous social group. These differences need to be taken into account when identifying or analyzing gender needs in designing women's empowerment programs (Mosedale, 2005). The need to address both practical and strategic gender needs have been recognized but the challenge still remains minimal efforts to translate paperwork into practice in terms of integrating women's issues into the mainstream of agricultural development (Razavi& Miller, 1995).Longwe's Women's Empowerment Framework illustrates Moser's perspective of gender needs. For instance, the framework recognizes that women's strategic gender need entails assuming control over decision making on certain productive resources. Attainment of strategic gender needs is the highest level of empowerment on the framework (March, Smyth, &Mukhopadhyay, 1999). To achieve this level, women's subordinate position in the society has to be challenged so that they are recognized as development stakeholders. Mosedale (2005) argued that third parties cannot be given the responsibility to empower women but they themselves should claim it. Similarly, Sharp et al (2003) noted the importance of women themselves perceiving that they can ably assume roles ascribed to men rather than depending on development agents to address their strategic needs.

They further noted that these agents can only succeed in addressing the practical gender needs. The strategic gender needs could face resistance as they challenge the social structures and their involvement could be viewed as an outside interference. The major challenge to Sharp et al's notion as argued by Taylor (1999), women spend much of their time and energy in trying to address their practical gender needs at the expense of mobilizing themselves for change on strategic gender needs. Mehira (1997) agrees with this notion that instead of aiming to be independent economic actors women put much emphasis on their reproductive roles.

2.2 Addressing Women's Practical and Strategic Gender Needs in Agriculture

2.2.1 Women's access to and control over Productive Resources

As mentioned earlier, women need to address their practical and strategic gender needs. The strategies that are employed demand resources hence access to and control over such resources is very vital if these needs are to be met. Agricultural production is one of the strategies that has been adopted by many countries globally especially in Sub Saharan Africa.

Therefore, productive resources that foster agricultural production need to be available to Women in terms of accessibility and control to address their needs. However, it should be noted that access to resources does not imply control over them (Kabira, 1997) since the one in control might dominate in the decision making.

2.2.2 Access to and Control over Land

In line with women's empowerment in agriculture is control over decision making on land use which according to Allendorf (2007) is the main source of livelihoods as well as power and status. Mutangadura (2004) emphasized the importance of land to women's economic empowerment. This is the case especially in countries that depend on agriculture for their livelihood and Asian countries are not exceptional. Allendorf noted that access to and control over land continues to be a major setback for women farmers which limit their ability to effectively practice sustainable agricultural development. The increase in value of land which has resulted into market oriented farming has put women at a disadvantage as men challenge women's rights to land even in matrilineal societies (Gray &Kevane, 1999). Women might sometimes lose access even to the land provided to them for food production (Lastarria-Cornhiel, 2006). Men have tended to dominate in making decisions about what to grow since societies are constructed in such a way that they control economic activities in the household (Squire, 2003).

In line with involvement in decision making over land use is the differences in allocation of land rights. Kabeer (1995) attributed the differences in distribution of resources and responsibilities between men and women to society norms which guide the process. In most cases women might acquire some rights over land but the major challenge is ownership of the land (Gray &Kevane, 1999). However in terms of land ownership, Walker (2002) reported that only a small elite and professional or women with high economic status have secured rights through ownership of land and are able to influence decisions. This notion was supported by Chudgar (2010) stressing that women's education level and income may all be used as measures of bargaining power. Therefore as suggested by Patkar (1995), investing in education for women would change the nature and forces that marginalize women in terms of control over productive resources and services.

As reported by Walker (2002) and Gray &Kevane (1999), women acquire rights to land through their membership in households especially through marriage as kins. This generally means that these rights might be revoked in cases of divorce or sometimes widowhood (Gray

&Kevane, 1999) as some relatives resort to grabbing land since the women do not own the land. Ideally in patrilineal societies where women follow and live at the husbands' home are supposed to continue enjoying their rights to land even in the case of their husbands' death unless if they decide to remarry or server ties with their marital land.

In terms of inheritance, generally most smallholder farmers have land that is held under customary land tenure which are mostly patrilineal and patriarchal (Seeley, Grellier, & Barnett, 2004). Inheritance of land in most societies is determined by whether they are patrilineal or matrilineal. This system normally gives children heirs to the land from their parents. According to Davision (1993) inheritance in patrilineal societies is through the father's lineage whilst in matrilineal is through the mother's lineage. These systems have tended to give more authority to either men or women who then leave the other gender vulnerable in terms of access and control over land. In line with gender needs, ownership of land is both a practical and strategic need since land apart from assisting them undertake their feminine roles, it gives them power in terms of decision making over its use (Taylor, 1999). Moser's framework also recognizes acquisition of legal rights over property where land is part of as meeting women's strategic gender needs (March, Smyth, &Mukhopadhyay, 1999).

Access to and control over land also faces further challenges in the face of changes in land value. Gray &Kevane (1999) noted that the increase in value of land has led to men challenging women's rights to land even in the matrilineal systems. The trend has resulted women advocating for eradication of such customary land practices. Women have formed movements advocating for their rights to be able to inherit, purchase and own land in their own name rather than customary land tenure.

2.2.3 Access to and control over Inputs and Credit

Land utilization is another essential aspect of agriculture development besides having land rights or ownership. Gender inequalities influence the differences that exist between men and women in accessing inputs for land use despite being a challenge to both. According to Moser's Framework, addressing the challenge of inputs to women entails meeting their practical needs since it does not challenge their subordinate nature (March, Smyth, &Mukhopadhyay, 1999). An opportunity to improve women's access to inputs is through provision of credit to women. Credit gives women the ability to expand their life choices especially where control over it is exercised hence empowering (Mehira, 1997). However,

control over credit is not a guarantee for increased incomes as other factors might also play a role (Mayoux, 2000). Kabeer (1995) noted that though it is essential to support women with credit but formal microfinance institutions have failed to reach these women. She attributes this to the mismatch between the norms and procedures of the bank and on the other hand women's needs and constraints.

Furthermore, the complexity of the procedures requires some form of literacy which is lacking in majority of poor women (Milner, 2005). According to Taylor (1999) loans that are procured by the household only addresses practical gender needs unlike those procured by women which strives to achieve both strategic and practical gender needs. This is so because loans to households especially those headed by men do little to challenge the structures that perpetuate gender inequalities in the household (Kabeer, 2000). Instances where women have registered success with the use of loans they obtain have been as a result of having autonomy or control over the credit and its use (Kabeer, 2000). On the other hand, Garikipati (2007) argued that women who have access to credit might not attain their needs but strengthen their households' ability to cope with vulnerability. This is so since the credit will enable them to address household needs that might not in any way be linked to their practical or strategic gender needs. Littlefield, Murduch, & Hashemi (2003) noted that in some cases women who have obtained loans have been able to challenge gender inequalities. The loans have enabled them to be recognized in the process of decision making as they possess power over the loan. Interestingly, these interventions have further marginalized women in some cases especially where men being the head of the house and the decision maker have tended to control the use of the credit obtained by the woman (Kabeer, 2000). In this case the credit is prone to abuse and the women still take the responsibility of repayment and struggle to source funds for credit repayment for fear of reprisals like shame in the community. Therefore as argued by Ashraf, Karlan, & Yin (2009), just increasing income support to women can further marginalize them but giving them control and property rights over the allocated support can contribute towards their empowerment.

2.2.4 Women and Markets

In line with land rights and use which is also crucial across the production chain is women's access and control over agricultural markets. Kabeer (2000) argued that the most effective way of increasing women's control over loans, public presence and self-confidence is by enhancing their access to markets. Furthermore, FAO, IFAD, & World Bank (2009) noted

that access to agricultural markets is very fundamental as it is source of income, assets and factors of production and consumption which are essential for sustainable livelihoods. It is significant to recognize as they noted that lucrative markets are mostly accessed by those who have access to and control over capital, mobility and other social cultural freedoms.

Efforts have been made to improve women's participation in market oriented farming at all levels. For instance, according to FAO, IFAD, & World Bank (2009), the sustainable livelihoods approach which is being popularized by the DFID promotes participation in lucrative markets by all stakeholders to which women are part of through enhancing access to and control of capital. The approach further addresses mobility and social cultural factors that limit participation of women as stakeholders.

Furthermore, in Nepal, states in coordination with NGOs have promoted the integration of women into farmer organizations which eases logistical costs incurred when operating as an individual. The major challenges with markets as observed by Kabeer (1995) are difficulties in altering the internal dynamics of the market so that they are gender responsive due to rigidity of the market institutions.

2.2.5 Women and access to Extension Services

Effective land utilization requires proper knowledge and skills amongst the women farmers. Women would be empowered in a dynamic process that involves developing their capacity to ably participate in the economic and non-economic livelihoods (Syed, 2010). Provision of extension services forms part of this process. Despite women contributing more than 50% (FAO, IFAD, & World Bank, 2009) of agriculture labor but access to extension services has been difficult in most areas. Several factors limit their participation in extension activities where they can gain knowledge and skills in improving agricultural productivity. Identification of needs or needs assessment to effectively provide these services has been a challenge on the practitioners as they fail to localize the frameworks for gender analysis (Porter & Smyth, 1998). In the event that these frameworks which are implemented in a participatory way are localized, indicators of empowerment can also be agreed locally (Mosedale, 2005). Participatory approaches in identification of needs have been found to counter preconceptions about the poor especially women if they are involved (Kabeer, 1995). Littlefield, Murduch, &Hashemi (2003) argued that a program designed appropriately can have a strong positive effect on women's empowerment hence the need to be keen in

identification of needs and indicators. Another challenge with provision of extension services to women farmers is scheduling of these activities which does not take into account their reproductive roles and eventually affects their participation. (Kabira, 1997). In line with Moser's framework on gender needs, timing of extension meetings is a practical gender need as it helps women to fulfill their society prescribed obligations (Taylor, 1999). Therefore, indirectly men are targeted on the assumption that they will share the knowledge with their wives. This line of thinking was challenged by Basu, Narayan, &Ravallion (2002) that some literate members might deliberately conceal information to block benefits hence it is not obvious that the illiterate members will access the information. Therefore even contribution of other members in decision making pertaining to the subject might be limited due to inadequate information.

Besides timing of activities, Kabeer (1995) observed that most extension services are designed for broad generic categories of people increasing the possibility of ignoring the vulnerability of women. However, labor and time saving technologies have been developed to address the challenges that women face in some areas. Doss (2001) found that where technologies reduces women's challenges and increase their independence, benefits to them are substantial. Nevertheless, Quisumbing&Pandolfelli (2009) noted that women in some cases are reluctant to adopt these labor and time saving technologies even if they increase returns to their labor because they do not control the benefits.in the event that women attend such activities, adoption is affected due to low levels of literacy among women hence to internalize the technologies is difficult. However, as argued by FAO, IFAD, & World Bank (2009), adoption of new technologies is also depended on availability of required assets to implement it, information sharing and access to productive resources. Women tend to have limited access to and control over these resources hence accessibility to improved technologies is not guaranteed.

2.3 Policy Responses on Women Participation in Agriculture

It is imperative also to assess the policy environment on women's participation in agricultural development since as guiding principles they can reduce or perpetuate gender inequalities. Globally, the major guiding principles for development are the millennium development goals. Littlefield, Murduch, &Hashemi (2003) noted that progress on MDG 3 which seeks to promote gender equality and empower women by 2015, is influenced by among other factors functional government, economic growth, physical security and basic infrastructure

like transport.

The World Bank has promoted several initiatives towards women's emancipation from the structures that marginalize them. One such initiative is the Gender Action Plan which focuses on integrating women as ultimate clients into agricultural projects to enhance supply responses in times of crises (World Bank, 2010). The initiative achieves this by among other things promotes women's access to factors of production like land, agricultural inputs and finance. Positive trends have been reported by Buvinic (2010) that there have been significant improvements in land productivity in the Ethiopian rural land certification project. The project was promoting joint land titles between men and women which increased women's power on decision making. The World Bank recognizes that strongly held beliefs that influence people's attitudes and behaviors related to gender identity needs more time to change. The Beijing platform for action in 1995 adopted gender mainstreaming as a global strategy to achieve gender equality (United Nations, 2002). This strategy was established on the basis of ensuring effective achievement of development goals through integrating gender perspectives in the development process. The Southern African Development Corporation (SADC) has also adopted the strategy in line with the Beijing platform for action and other global and regional institutions. The strategy which is contained in the SADC declaration on agriculture and food security seeks among other things repeal discriminatory laws that prohibit women's access to finance, land and other key agricultural inputs (SADC, 2008).

Therefore, the strategy has been adopted in agriculture development by most countries to address gender inequalities that exist in the sector. However, though the strategy reveals structural and institutional constraints to gender equality United Nations (2002), changes seem to be very minimal as women still continue to be marginalized. These structures and institutions need to undergo reforms to adapt to the strategy if the ultimate goal of gender equality is to be achieved. According to Omamo&Lynana (2003) the challenge is to transform the system into more open, dynamic and multidimensional to reward women's participation. In order to ensure adherence to the agreed terms of the Beijing declaration and platform for action, the United Nations Commission on the Status of Women was mandated to play a central role in monitoring implementation (United Nations, 2010).

Another response to the plight of women farmers is the convention for the elimination of discrimination against women (CEDAW). The convention promotes their access to land, credit and income. However, there is slow progress though most countries have ratified this

convention. The slow progress could be attributed to the inadequate challenge to the structures and institutions that have been socially constructed and sustained which promotes male dominance. This response together with the Beijing Platform for Action mutually reinforces each other in achieving gender equality and empowerment of women (United Nations, 2010). In the same vein, the SADC protocol on gender and development calls for nations in the SADC region to ensure adherence to international and regional instruments to eliminate all barriers that prevent women and girls from meaningfully participating in all aspects of life (SADC, 2009). The protocol emphasizes among other things easing women's triple role burden, equal participation in policy formulation and access and rights to credit, capital, mortgages, security and training.

2.4 Context Analysis of Women and Agriculture in Nawalparasi District

Highlight of influencing factors to women's lack of recognition in the agriculture sector in the Nawalparasi Districts context. The government of Nawalparasi District is promoting market oriented farming hence the chapter will highlight women's access to and control over factors of production to realize the national goal. In line with chapter 3, women's land rights in Nawalparasi District which was seen as an influencing factor for women's participation in to other developing areas will be contextualized to the situation.

In relation to market oriented farming which the government is promoting, women's challenges especially in terms of access and control over decision making at household level, inputs, credit facilities and extension services. Furthermore, the role of research and farmer organization would be presented.

2.4.1 Women's Contribution

Women continue to play a vital role in agricultural development hence the need to recognize their role and enhance their capabilities to improve on agricultural productivity. Despite contributing much to agriculture, they have not benefited much from their labor. They further found that women have found coping mechanisms to inadequate benefits from agriculture by doing *mela,perma* (casual labor) for income to sustain their household's livelihoods. Longwe& Clark (1994) argued that women should be active participants in agricultural development to enhance their own capacities and overcome their challenges. In view of a lack of recognition of women's contribution towards agricultural development, efforts need to be put towards social changes that will enable them to actively participate in the process so

that their input is duly recognized. With reference to the previous chapter on literature review factors that affect women's active participation and access to benefits from the agricultural based economy stems from gender related sociocultural held norms. This has resulted into increased likelihood of women depending on men (Masanjala, 2007).

2.4.2 Women and Land Rights

Land rights in terms of ownership and usage are very crucial in agriculture development since it is the medium for most of the agricultural activities. Ownership of land has an economic power and status attribute especially where it is legally owned. Mutangadura (2004) argued in support of importance of land rights to women in that land is a fundamental resource in their livelihood, economic empowerment and to a greater extent in their quest for equity and equality within a patriarchal society. She further points out its significance as female headed households increase hence the need to review or refocus on the distribution of land rights. Kachika (2009) also noted that poverty reduction goal is achievable if wome.s rights to access and control over land.

According to a study by Chanza (2011), having rights over land provides the power to make decisions or to be involved in the decision making process involving land use. Doss (2001) also noted that technology adoptability relies on who makes the decision which is determined by access and control over land. Furthermore as illustrated in the previous chapter which was reviewing literature, land can be used as collateral to obtain credit from financial institutions to address the challenge in accessing inputs.

Though land is an important variable in agriculture production, its scarcity is a major challenge in Nawalparasi District as currently the average land holding capacity is 1.2 hectares per households but the poor occupy less than 0.5 hectares. As the average household size is as high as 4 unless used to its maximum productivity, such small pieces of land would not produce enough food for the year. In Nawalparasi District, farmers with land holding size of less than 0.5 hectares produce food enough to last for three to four months. This is so because scarcity of land is often compounded by the gender inequalities in terms of rights to usage and ownership.

Land access, ownership and inheritance in Nawalparasi District mostly follow the rules of the kinship and descent or lineal system. The gender profile of Nawalparasi District indicates that the population follows the patrilineal system where inheritance is through the son; women

have limited rights especially on ownership and may earn rights through marriage. They are vulnerable to land grabbing in the event that their spouse dies and also lose rights in case of divorce. In this case, land rights are passed on from the father to the sons and the daughter would acquire those rights through marriage in their spouse's home area. It should be noted that though the woman might be married, the wife has little authority over land and would be overruled by the in-laws in terms of decision making since they have more authority.

2.4.3 Women's Participation in Market-Oriented Farming

Nawalparasi District just like other has over the past years promoted production for the market other than the traditional subsistence farming. In line with market oriented farming, there is the need for increase in opportunities on cash cropping, agriculture labor and even off farm income generating activities if agricultural development is to be fostered. Though some of the section shows that women control land in some parts of Nawalparasi District, land ownership on its own cannot alleviate poverty unless if supportive infrastructure exists which provides access to vital agriculture inputs at affordable rates. This section will assess other factors that affect women's ability to effectively engage in market oriented farming. The section will highlight women's ability to contribute towards decision making in the household besides presenting their ability to access and have control over productive resources other than land. The resources that will be of major focus as earlier highlighted in the literature review will be inputs, credit services, extension services besides assessing the extent to which belonging to farmer organization would reduce challenges that come with market oriented farming and gender inequalities.

2.4.3.1 Household Decision Making

Market oriented farming has some gender connotations as it involves decision making at all levels of production and marketing of agricultural products. Households decide what and how to produce and in male headed households, the woman in most cases might not have the power to influence decisions. Most women in Nawalparasi District though they might speak out in meetings or are leaders in associations but in their households they are unable to influence decisions. On the other hand, women have also been given entitlements on decision making and control for certain traditional crops like rice, paddies, maize, etc. these crops have tended to be a source of income for women since food security is mostly conditioned on rice and maize, the staple food. Though these decisions might suggest that women are empowered, there are little consequences if they are apportioned based on gender division of

roles (Kabeer, 1999). In that case men will still dominate in making major economic decisions at the expense of the women. In line with women's entitlement over some horticultural crops that one of the positive outcomes of market liberalization was that women dominate in the sale of fresh produce in the informal markets in Nawalparasi District. In some cases, household economic situations were enhanced as a result of high returns from these horticultural crops and other cash crops like vegetables after the market liberalization. They further noted that due to lack of capital very poor people especially female headed households became worse and relied on cash transfers.

Whilst the program provided for diverse opportunities for smallholder farmers in terms of diversifying livelihoods, it came with challenges for them too. Competition on the market was the biggest challenge providing a disadvantage for the poor whom the women make most of the proportions to compete at the same level with all the players on the market. According to the key informants of the research, female farmers lack skills in enterprise identification, planning, management necessary for developing products with high quality to compete on both local and national market. These skills are mostly not recognized in male headed households since men make most of the decisions whilst these challenges would be very noticeable in female headed households. As earlier on cited, female headed households have been on the increase since households have undergone changes in dynamics due to the trends of male member of family going to other countries in search of source of income. The increase in female headed households is estimated to be around 30% of the smallholder farmers (key informants). Therefore, this calls for change in focus on whether control over crops should be based on gender

2.4.3.2 Access to Inputs

In line with household decision making is women's challenge in accessibility to inputs for agriculture production as presented in chapter 3. It is therefore important to ascertain in the case of Nawalparasi District, women's accessibility to inputs since production for the market requires an investment into agricultural inputs so that the products should compete on the market. Inputs like organic fertilizers have fetched high prices on the market at the expense of most women smallholder farmers who often cannot afford the exorbitant prices. In Nawalparasi District, agricultural programs have been initiated that aim at providing credit in kind on a revolving basis to farmers where in puts like fertilizers, seed and pesticides are given to farmers credit. In addition, the government has tried to provide inputs to the more

vulnerable at subsidized rate through the farm input subsidy program and other programstargeting women farmers. However, this has been to enhance maize and rice production to attain food security which is among the top priority areas.

However, most of these inputs are provided to household heads enhancing male dominance since they monopolize economic decision making (Salcedo Du Bois & Findeis, 2009). Similar efforts have been used to address the challenge of access to inputs by vulnerable groups like women through projects. The governments together with other stakeholders have initiated projects that address the challenge on access to inputs to ensure that production is increased amongst the vulnerable groups especially women in female headed households. For instance, almost 50% of the smallholder farmers own livestock ranging from goats, poultry to cattle and pigs). In some instances livestock pass on programs are established. Under this initiative, farmers are given some stocks on a credit which they pay back agreed number of siblings by passing on to the next farmer. Similarly, in crop production the government has tried to address the issue of access to inputs by targeting women farmers through the seed multiplication program. This gives opportunity for women farmers who could not access such inputs to plant and repay an equivalent after harvest As in the pass on program, here again the seed is given to farmers especially the lead farmers who pass on part of the produce as seed to other farmers and the trend continues until all interested farmers are reached. The lead farmers are selected farmers who are trained on particular enterprises so that fellow farmers can learn from them and in this case they are also used to multiply seed so that it is made available to all that demand it. On safety nets that the impact has been slow as the inputs have either been sold or consumed since these poor households have to address their immediate needs like food.

2.4.3.3 Credit Facilities

Women especially in female headed households make up most of the poor population hence to invest meaningfully in agriculture, is usually a challenge. Coping strategies to the challenge of access to inputs have been deployed by women in Nawalparasi District and credit is amongst them. According to the new draft national gender policy, women's access to credit in Nawalparasi District is as low as between 10% and 15% Women in Nawalparasi District is improved with access to credit as it implies independence access to resources.

In addition to the loans giving independence access to resources, by contributing to the household economically, loans raise their self- esteem and provide them the much needed

status. These findings emphasize the need to empower women with access to capital though access in itself is not enough since there are other socioeconomic factors that might hinder the empowerment process. This is in line with what Kabeer (1999) argued that access alone is not a guarantee to empowerment but translation of the resources into ability or power to make choices or control. Ideally, giving credit to people who are not empowered or not involved in decision making on their credit will not serve the purpose as is the case in Nawalparasi District where most of the few women who have access to credit, control over it rests upon men in the households.

Besides lacking control over the loans,, most of these smallholder farmers live in the rural area where financial institutions are very few if not non- existent. This then prompts them to use informal institutions like kinships and other networks which might demand high interests (Salcedo Du Bois &Findeis, 2009). Zeller, Diagne, &Mataya (1998) noted that expanding existing credit programs could enhance agricultural production amongst smallholder farmers and rural incomes. They further argued that due to the high poverty levels amongst female headed households, in the absence of access to credit, it is very challenging to engage in cash crops which bring more returns. These cash crops demand more capital besides just being labor intensive.Illiteracy is a draw back for women in Nawalparasi District as it is very challenging for them to understand the conditions of the credit and ably sign agreement forms. Therefore, the challenge of illiteracy would not be there in as far as accessing loans is concerned with improved technologies which are being used.

Another area worth noting is the utilization of the loans. Giving out loans to women for the improvement of agriculture development will be meaningless if it is not used for the intended purposes of agriculture. Women in Nawalparasi District tend to prefer off-farm income generating activities so that they maintain control over them since farming is mostly controlled by men. Therefore, this calls for the need to share proportions of power in agriculture if women are to own and strive to invest in it. Furthermore, most financial institutions are very risk averse especially on farming due to unpredictability especially in Nawalparasi District where they depend much on rain fed production. As discussed earlier on under land rights, women's limited land rights also limits their ability to offer collateral for a loan. The absence of ownership of physical assets amongst women since men tend to dominate in terms of proprietorship of property, affects their likelihood to be given loans. However, women have found solace in joining farmer groups where the group is used as

collateral. Unfortunately, most groups form around people of similar socioeconomic and poverty characteristics, a scenario which would bring challenges. This kind of segregation or discrimination would disadvantage the poor more that would have challenges to form their own group.

Most financial institutions give out loans to women due to assurance that they will repay unlike men who cannot be trusted for fear of default. In most cases these loans are not meant for agricultural activities and since repayment in some cases might start within the shortest period of time, women tend to face difficulties to invest. They end up repaying part of the loan using part of it. Moreover, the assumption is the loan is not going to be used for unforeseen risks in the household as is mostly the case with women.

2.4.3.4Women and Provision of Extension Services

Though women's involvement in making major economic decisions especially on agriculture production besides improving their access to inputs or credit to procure inputs is critical, knowledge and skills across the production cycle is equally important. Provision of extension services and advice to female farmers is amongst the most critical aspect if women are to be more productive in the agricultural sector. The agriculture strategy on gender indicates that men have dominated in terms of access to extension services but their migration to seek employment deprives households' agricultural knowledge and expertise. This would partly affect household productivity. Furthermore, the assumption is that women as major labor providers as indicated earlier on, need to be up to date with technology or innovations which makes their access to extension services very crucial. There have been changes in approaches to provision of such services in Nawalparasi District from among others top down and male dominated to demand driven and gender responsive approaches. However, the impact has not really been experienced especially on the issue of women integration. Several NGOs have come up with different initiatives that have either directly or indirectly affected the female farmers. The government and other stakeholders have ensured that extension services are provided, though with challenges like inadequate funding, diagnostic facilities and equipment, inadequate infrastructure. For instance, the establishment of drug revolving fund has been promoted which effectiveness in ensuring that farmers especially women who have limited access to such services due to transactional costs involved to purchase drugs for their livestock, access them within their proximity. The initiative involves training lead farmers who are then provided with drug boxes and farmers seek advice from them apart from buying drugs for their stocks. The funds realized are used to replenish the drugs.

2.4.3.5 Research and Participation of Women in Agriculture

In relation to research, there have been efforts aiming at reducing the burden of labor and time on women farmers through time and labor saving technologies. The government has been promoting such technologies to farmers but the adoption levels have not been satisfactory. Doss (2001) argued that farmers are willing to adopt technologies that give high expectations for increased output and/or the reduction of constraints to production like labor. Enhancing the use of labor and time saving technologies would give women a chance to rest,

Indulge in leisure and even concentrating on other income generating activities as a way of diversifying their livelihoods. Developing of such technologies need to take into account the socioeconomic appropriateness of the women farmers for them to be adopted. Quisumbing&Pandolfelli (2010) noted that women might be reluctant to adopt labor and time saving technologies even if there is possibility of increased returns on the basis that they themselves do not have control over.

2.5 Policy Reforms to Address Gender Inequalities in Agriculture

2.5.1 Land Policy

Nawalparasi District strives at adopting strategies that aim at reducing the inequalities that exist in the agricultural sector between men and women. The major challenge amongst the two genders as presented in chapter 3 is the differences in access and control over productive resources in which men dominate over women. As highlighted in the previous chapters, women face challenges to possess rights over land which is a basis for agricultural development. Mutangadura (2004) argued that land is a fundamental resource for women if their economic empowerment is to be realized in a male dominated society.

In response to women's limited rights on land usage and ownership, the land policy was revisited to ensure tenure security and that no single gender is discriminated against in acquiring rights over land. The policy should now entail that every child regardless of gender should have equal opportunities to inherit land rights from their parents, rather than a single gender dominating, regardless of lineal system. The will provide equal opportunities to both boys and girls to inherit land. However, as noted by Chirwa, Kydd, &Dorward (2006) land still remains the power base for traditional leaders in the rural areas. This has been as a result of strong opposition from some senior chiefs against any perceived modification in their

authority over land (Peters &Kambewa, 2007). This is also in line with what Hajat (2002) noted that traditional and cultural forces are the major possible challenges in implementation of the policy as alterations or risk of losing some norms would be difficult to accept. Henceforth, farmers especially smallholder farmers continue to allocate land rights based on norms and rules of descent, succession and inheritance based on kinship (Holden, Kaarhus, &Lunduka, 2006). Another area that the new land policy seeks to address is the land title where families or individuals can own land jointly. However, in terms of registration, the head of the household is the one registered as the proprietor which would put women at a disadvantage especially for those in male headed households. This is so because men are in most cases heads of households and their name being registered could also give them some power over the property in some cases. In this cases, women will only be registered as (Peters &Kambewa (2007) illustrated when they assume headship which in most cases happens in the absence of men. Therefore, the policy falls short of addressing women's strategic gender needs by denying them equal opportunities as it assumes men and women are at equal footing hence difficult to achieve equal access.

2.5.2The Agricultural Extension Policy

Since 1950, the country has practiced several extension models and approaches, with support from donors or from the government's own resources. The models or approaches adapted in Nepal are Conventional, T and V, Block Development, Tuki, Farming System Research, Farmer Group Approach, Contract out / Partnership of Extension Program, IPM (Farmers Field School) and others. Although all these approaches have some strengths and weakness, they have made significant contribution for transfer of technology to the farmers.

Initially, Agricultural Extension System in Nepal was used as synonymous to government or public services. The economic globalization, liberalization, privatization and advent of information and communication technologies have been brought tremendous changes in the field of agriculture development. The needs and interests of the farmers for recent knowledge and information of production technologies and production objectives are changing rapidly. Thus, farming is now closely linked with quality production, market competitiveness and sustainability rather than increasing production alone. As a result of the paradigm shift in agriculture, the role of government extension system has also changed. It is realized that the role of government should be shifted to the facilitation role and the private sectors should be encouraged to provide the extension services. Now, there are different types of organizations

other than government agencies providing extension services to the farmers on contract out and partnership basis.

Besides policy reforms recognizing inequalities in land rights and responsibilities, the ministry of agriculture and food security recognized the need to empower people to actively be involved in accessing extension services. According to the MGDS, effective decentralized delivery of extension services especially agribusiness skills, is very significant for economic growth (GoM, 2007a). The high illiteracy levels in women and their multiple roles which consumes much of their time, constrain them in accessing extension services especially with reference to market oriented farming which requires some basic education. The agricultural extension service provision until recently used the top down approach but the current policy promotes pluralistic demand driven provision of services. The approach entails that farmers' demand for services they need from the providers and all stakeholders should be involved in fostering agricultural production. Coordination of service development and delivery remains an area for improvement as it remains a major challenge. The policy aims at promoting equalization in agricultural extension provision by advocating for gender, empowerment, poverty, and environment. This was against the background that previously provision of extension services did not take into account the differences that exist amongst the farmers. For instance, though the policy demands that those in need of services should pay, it applies only to those with a competitive advantage on the assumption that they are able to accumulate more resources hence more purchasing power. Since women form most of the poor, then if the policy is implemented they will be disadvantaged where they have to pay for the services.

2.5.3 The National Gender Policy

Despite important progress, gender inequality continues to be a major hindrance to Nepal's development. Women are confronted by a range of gender-specific constraints that find their origin in deeply ingrained social norms, practices and power structures. They lead to socially imposed limitations to women's mobility, productivity and overall ability to reach their full potential. This includes a narrow definition of roles and responsibilities women are expected to take on, particularly in leadership and economically productive roles. Their access to resources and asset is more limited when compared to men. Despite an increase in recent years, still only 19.71 percent of households report ownership of land, house or both in the name of a female household member.

The Government of Nepal has shown a strong commitment to the achievement of women's empowerment and gender equality. The state is signatory to various international conventions on gender equality and women's empowerment, including the Convention for the Elimination of all Forms of Discrimination Against Women (CEDAW), the UN Millennium Development Goals (MDGs) and the Beijing Platform of Action. The 2006 Comprehensive Peace Agreement that followed ten years of conflict provided an opportunity to overhaul the old social structure. The adoption of the principle of proportional representation and inclusion is now strongly reflected in the Constitutional Assembly (CA) debates. A quota system secured 33% women, 34% Madhesis, 33% Janajatis and 8% Dalits in the CA. The Government has also adopted gender responsive budgeting principles, classifying 19 percent of the budget as directly gender responsive (2011-12 fiscal year). The Ministry of Federal Affairs and Local Development has adopted a Gender Equality and Social Inclusion (GESI) policy and has allocated 35 percent to targeted spending, out of which ten percent is specific to women. The Government continues to implement a tax rebate policy to encourage women's land ownership and it has included GESI concerns in the Agriculture Development Strategy. Within the current Three Year Plan (2010-13), achieving gender equality is a crosscutting theme. The National Plan of Action (NAP) on Implementation of the United Nation's Security Council Resolutions 1325 & 1820, likewise, aims to promote gender equality and women's empowerment by putting an end to different types of gender-based violence and discrimination against women through social, economic and political empowerment of women. The Relief and Recovery pillar of the NAP aims to formulate and implement gendersensitive immediate relief and recovery programs for conflict-affected women and girls in a participatory manner to respond to their actual health, education, financial and economic needs. The Government adopted the National Strategy and Plan of Action related to Gender Empowerment and for Ending Gender based violence (2069/070 – 2073/074 B.S) in 2012 replacing the previous 2010 National Action Plan on Gender based violence.

In line with its mandate, UN Women Nepal has been promoting gender equality and women's empowerment in partnership with the Government of Nepal, the UN in Nepal, development partners, and Civil Society organizations. UN Women has played a key role in mainstreaming gender and women's empowerment concerns in the various national plans, policies

2.6 Chapter Conclusion

The chapter has demonstrated that globally most societies have put women in subordinate position in relation to men. This eventually limits their contribution to agricultural development as they struggle to meet their practical and strategic gender needs. The chapter

has presented theoretic perspective of women's empowerment in the context of the gender needs. Furthermore, global initiatives towards enhancing women's empowerment have been presented in the chapter.

CHAPTER III

RESEARCH METHODOLOGY

3. Research Methodology

Nobody can argue about the fact that besides being boring, time consuming and requiring sufficient funds the study demands certain skills and correct approaches on the part of the students. For the detailed and exhaustive study on above subject, it is essential that we student instead of depending on a couple of methodologies utilize a many approaches as to be possible with this concept, I would like to apply the following techniques for the collection, translation, interpretation study and analysis of data.

3.1. Description of the study area

3.1.1. Location

Nawalparasi district is located in the western development region of Nepal more over it is also lies in middle part of the Nepal from east to west. Kawasoti VDC., is the one of the develop VDC in Nawalparasi District, but it is not well develop in remote area where most of the people are ethnical and Tribal group are live there. Geographically it lies between 270'21'-270'47' latitude north and 830'36'-840'25' longitude east,

3.1.2 Climate

The total area of the Nawalparasi is 2186 km², among that it has mixed up into special region like hilly and Terai region. The average temperature of this district is 37 in highest and lowest is 5' Celsius. It has mainly two kinds of climate are available that is tropical and temperate. The rain fall pattern is erratic and irregular in the area. Due to the severe and heavy rains, soil erosion and flooding are very common in low-lying of the study area. In times of extreme rainfall, mudslides damage roads, Small bridges and otherinfrastructure and localized flooding are common (Nawalparasi District profile 2072/73)

3.1.3 Soil

The dominant soil type of the study area is fine to medium textured sandy loam underlie withancient Precambrian basement rocks in the plains and calcareous soil at the hills. Over-clearinghas led to significant soil erosion problems, with mudslides occurring on the area (Nawalparasi District profile2072/73)

3.2 Research Design

A descriptive cum exploratory research design was applied to analyze the present situation of the study area about the issues of the prospects and challenges for women's empowerment through agricultural development in Nawolparasi District, a case study of Kawasoti VDC,

3.2.1 Sampling Techniques and Sample Size

The study was conducted at Kawasoti VDC special in three wards among 9 wards having 2870 houses. The lower part of Kawasoti includes ward no.1, 2, 3, middle part includes ward no. 4, 7, 8 and upper part includes ward no. 5, 6, and 9.Out of these three parts, 3 wards were selected by using stratified random sampling for this study. On these bases, farmers were selected on random basis from each ward that is in the age group of 20 years and above. It was include both male and female respondents; a total of 100 households were interviewed in three wards, two key Informants were also interviewed with a total of six Key Informants in three wards. The researcher feels that the result obtained from the intensive a representative view for the overall situation as it prevails now in the selected village communities.

3.2.2 Method of the study conducted in Kawasoti VDC selected farmers

Descriptive method was used for this study. The research utilizes both quantitative and qualitative methods to clarify concepts, characteristics, descriptions, counts and measures to demonstrate implications of the issue under question. Data presented in the study are obtained from primary and secondary sources. Primary data is collected directly from respondents using questionnaires and interviews and group discussion with focus groups. Secondary data was collected through review of related literatures.

3.2.2.1 Quantitative method

The quantitative research relies on field data collected using structured questionnaire that included questions on different issues in practice and the role of women's empowerment in agricultural development. Basic information was collected on demographic and socioeconomic situation of survey respondents. The questionnaire was coded by peasant to distinguish the three wards of kawasoti VDC among 9 wards.

3.2.2.2 Qualitative method

The qualitative research mainly focused on the role of women's empowerment in agricultural development in the study area. Information is attained through interviews and focus group discussions by using interview and discussion guides. Secondary data are collected from VDC office of Kawasoti and Agriculture office of Nawalparasi district, Land administration office, Women's Affairs, Healthy office and Cooperative and Marketing office and education office. The discussion was undertaken to collect information from relevant bodies involved on actual implementation of the role of women in agricultural practice by using open and close-ended questions. Focus group discussion was conducted with rural women in the study area. The focus group discussion was unstructured, thus allowing participants to open up and discuss freely. Useful information was gathered as a number of issues were raised from participants. The focus group discussion offered opportunity to capture case stories and to direct observations.

3.2.3 Data processing and analysis

Quantitative raw data collected using questionnaires was organized and pre-processing test was carried out right after the field data collection was completed, and data was arranged categorically. Questionnaires were coded by each ward to facilitate analysis of questions on which respondents require to specify their opinions and to facilitate analysis of the openended questionnaire. Responses on these questions were carefully collected and summarized. Outputs were categorized into different components relating to relevant variables for convenience in analyzing the findings. The completed interview schedules was scrutinized, verified, edited and arranged serially for coding, in two master code sheets was prepared one for data collected from the households, another for data collected at the grass root level and leaders. The data was processed by using SPSS software. Data is presented using statistical techniques such as, frequency distributions, tables, pie chart, measures of central tendency and simple measures of dispersion specifically ranges using percentiles and/or counts. Explanation is provided to clarify information on observed data.

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION OF DATA

4.1 Chapter Introduction

This chapter is a detailed discussion of what has been presented in chapter 3 and 4. The chapter aims to discuss the two chapters in relation to the significance of active participation of women in the agriculture sector. The chapter states a critical basis for promoting women's empowerment; henceforth study objectives will be achieved.

4.1.1 Socio-economic and Cultural Profiles of Rural Women

Personal, social, economic and cultural attributes of rural women are presented in this section to get an overall picture of the study area.

4.1.1.1 Age Distribution

The age of selected rural women varied from 19 to 65 years with a mean, median and standard deviation of 38, 39 and 9 years, respectively. Most belonged to the age group from 20 to 49 years(table 5.1). The number of rural women below 20 years of age and above 49 years of age was very low. The age group 30 - 34 had the highest rural women.

Table 4.1: Distribution of rural women by age group (n = 100)

Age group * (in years)	Number of women
15-19	1
20-24	7
25-29	13
30-34	22
35-39	16
40-44	11
45-49	17
50-54	7
55-59	2
60-65	4
Total	100

Source: Filed Survey, 2014

People are considered as young who are in the age range of 15 - 29 years. Considering this categorization and based on the observed age score, rural women were classified into three broad categories, namely "young" (up to 29 years), "middle-aged" (30 to 50 years) and "old" (above 50 years) and their distribution are shown in figure 5.1.

The data generated from the survey shows that 72% of the rural women were within the age bracket of 30 - 50 years, which actually represents the economically active population. Most of the economic activities are labor-intensive and that might explain the reason why the middle-aged group formed the majority. The need for women's welfare is usually higher at this period and the needs of their growing children could also call for additional resources. The participation rate of rural women in the labor force increases with the increase of age within an age limit of 20 to 44 years, where highest participation is recorded for the age group 40 to 44. In the present study 21% of rural women belonged to the young (up to 29 years) and only 7% was old (above 50 years).

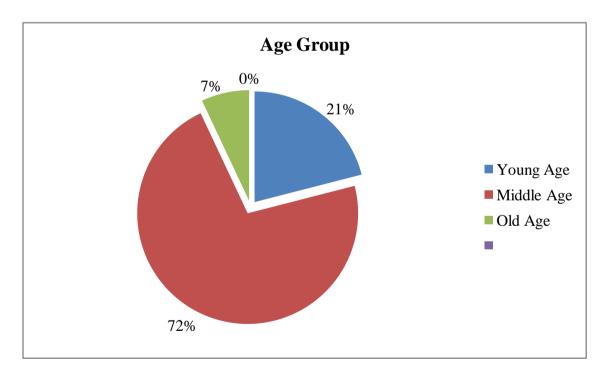


Figure 4.1: Age group of rural women (n = 100)

Source: Field Survey, 2016

The age of rural women has a great influence on their ability to take part in economic activities and, of course, influences benefit from the Agricultural activities in the survey area. The choice of income activities also depends on age. Young women of the study area

reported that they are less interested to conduct such Agricultural activities where they need to go to the market regularly. Young women also reported that they often are bothered and face problems from bad elements of the society when they conduct income activities in the market place, while such problem is relatively low for middle-aged women.

4.1.1.2 Educational Background

Based on education scores, five different categories were used to define education level namely illiterate (0), non-formal education (0.5), primary (1 - 5), secondary (6 - 10) and college/higher secondary (10 - 12). Non-formal education is the type of education offered to adults who have not had the chance to benefit from formal education, and the aim is to teach them how to read and write. As per educational levels, the distribution of rural women is presented in figure 5.2.

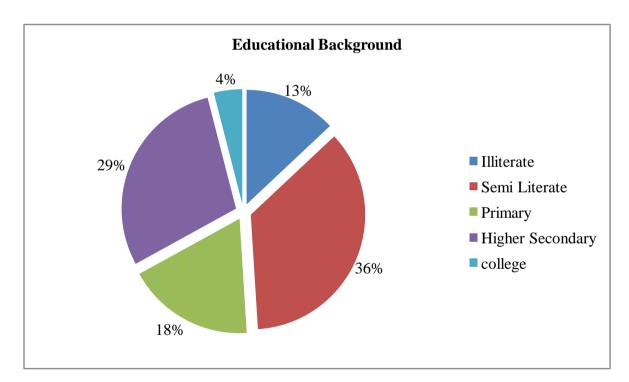


Figure 4.2: Educational Background of Rural Women (n = 100)

Source: Field Survey, 2016

Of the rural women, 13% had no education, 36% had non-formal education and 18% had elementary education up to the primary school level. Among selected rural women, 29% had education up to higher secondary school and only 4% had higher /college level education. In the rural society, girls usually take part in the household work, and parents are more willing

to send boys to school for education. A general belief among rural people is that girls will get married one day and move out to stay at their husband's house. Educating boys is therefore deemed more worthwhile than educating girls. That is why large numbers of rural women are deprived from education and possess a low educational status. It is interesting that though many of the surveyed rural women had no formal education, they still performed different income activities without recourse to their educational background. In the study area, rural people were less interested in continuing their education because of poverty and less opportunity of educational institutes. Under poor socio-economic conditions children are bound to leave school and to engage themselves in work for generating income. In recent years, to promote girls education, the government has taken some important initiatives like establishment of new schools, free distribution of booksand food for education programs. These initiatives have greatly improved the present scenario of educational enrolment of girls in the institutions in the recent years and may increase education levels even further in future. However, in this study the present educational status of rural women is reflected and these measures may not get had an impact.

4.1.1.3 Marital Status

Marriage is almost universal in our country, which is a tradition and social institution and is highly cherished for social and economic reasons. Most of the girls are found to be married at the early age in this research area. Most of the women reported that late marriage is not desirable and, to gain prestige in the society, most women have to marry. Infertile women are usually neglected while married women with children are more respected. In patriarchal society like ours, the most important social status that a woman achieves is that of a wife and mother. In addition, rural women pointed out that in their cultural community, the unmarried, separated and divorced women are often shunned.

4.1.1.4 Farm Size

Land is the most important and valuable asset for farm households because farm families depend mainly on agriculture. The household size may be a central matter in basic need measurement and livelihood analysis, but its output measurement is difficult to determine. The minimum farm size of surveyed rural women was 0.04 kattha and the maximum was 80 kattha. The farm household her are classified into five groups on the basis of land owned by the family. These are landless households (≤ 0), marginal farm households (≤ 1 kattha), small

farm households (1>20 kattha), and large farm households (>20 kattha). In the study area only four household categories were found, i.e. landless, marginal, small households and large households. Their distribution is presented in figure 6.3. The highest proportion (52%) of the rural women belonged to the 'small farm household' category, 1% to the 'landless household' and only 36% to the 'small farm household' category.

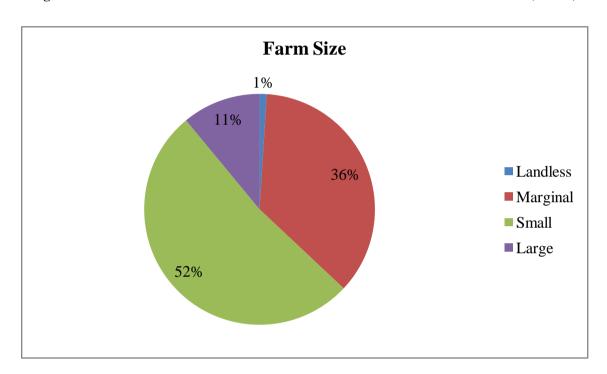


Figure 4.3: Distribution of Rural Women Based on Their Farm Household Size (n=100)

In the study area, per capita arable land is very low and agriculture is characterized by mixed farming, including field crops, poultry and cattle rearing, fish culture, etc., allowing households to get a maximum output from their limited resources as well as meeting household requirements and minimizing risk and uncertainty. The rural women usually practice homestead agro-forestry within this small area throughout the year and they grow different types of vegetables, fruits, spices, timber yielding tress etc., to promote micronutrient intake levels, overall food consumption and income of household. Sometimes they sell these items to overcome a period of crisis. Poor livelihood status therefore was more prevalent in small household size with few income earners. WFP (2005) have also documented that the size of a household and the availability of income earners are very important elements of vulnerability. Therefore, household size is the most potent means for improving rural women's personal as well as household income, dietary quality, food security and livelihood.

Table.4.2 Average Monthly Income of Respondents

Month household income	Frequency	Percent (%)
Low (less than 500)	36	36
Middle (501-1000)	31	31
Large (greater than 1000)	33	33
Total	354	100

Source: Field survey, 2016

The collected quantitative data indicated that the average monthly incomes of household earned from agricultural products revealed that 36% of respondents earn below 500 and of 31% respondents earn 500-1000 rupees, and 33% respondent earn above 1000 rupees (Table 5.4). According to Linda (2005), the income gained from these economic activities were used for household consumption and family support rather than re-investing it to expand their business. Similarly, being rural women, most are illiterate and have no proper skill for full employment opportunity. On the other hand, qualitative information obtained through focus group discussion with rural women revealed that, on average, the annual income and expenditure trends give priority to satisfy their household basic necessities, loan payments mainly for fertilizer and improved seeds provided by agriculture office on credit And purchase of farm inputs.

Table 4.3: Distribution of respondents by participation in decision making processes and control of resources at household level

Participation in decision making and control of	Frequency	Percentage (%)
agricultural resources in the households		
More female	20	20
More male	78	78
Equally female and male	2	2
Total	100	100

Women's involvement in decision-making and control of resources and on the amount of agricultural products to be sold reveals that 20% responded that women have the upper land, while of the respondents claimed only their husbands, while 2% responded of equal share of

both spouses (Table5.5). Based on the above facts it would be concluded that in most cases the husband control and decide agricultural resources without the participation of wives. What is surprising from this is that though women are doing a great others in both the triple role (Production, reproduction and community management) yet they do not have the right to make a decision and even their husbands do not consult them on the allocation of the produce. The United Nation statistically shows that women do 2/3rd of the available others in the world and earn 1/10th of the income. On other hand, they constitute 2/3rd of the illiterate people of the world and earn less than 1/100th of the world's wealth (Ruth, 1994) Most of the Asian women have not benefited from investment and trade of Agricultural products because they have limited access to land, credit, transport, etc. Women produce 80 % of basic food staff but receive less than 10% of the credit given to men. Agricultural productivity would have been increased by 20% if women have got access to credit (USAID, 2005). As men control all the resources, the men are the decision makers in economic, political and social issues, in addition to this society's attitudinal problem and illiteracy in the study area, has aggravated women's inequality in property right and economic development.

4.1.1.5: Participation of household members in livestock production

Table 4.4 Participation of household members in livestock production

Agricultural	Mar	ı	Boys	8	Wom	en	Girls	8
activities	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Clearing barn	0	0	0	0	85	85	15	15
Milking	30	30	0	0	60	60	10	10
Taking animal to the field	30	30	45	45	5	5	20	20
Feeding Animal	7	7	3	3	65	65	25	25
Taking Care of Calves	0	0	5	5	70	70	25	25
Average		13.4		10.6		57		19

Source: Field Survey, 2016

Table4.13 also revealed that the participation of household members i.e. 85% women in clearing barn, 60% women man30% and 10% girls in milking,30% men and 45% boys in taking animal to the field, 65 % women, 25% girls in feeding animals. In average 57% women participation in livestock production. Rural women have played significant role in livestock production in developing countries and they are active participants in the livestock management such as supply of fodder, milking, protecting animals

4.1.1.6 Average household members in the above cash crop production

Table 4.5 Average household members in the above cash crop production

Agricultural activities	Degree of household members participation in percent			
	Man	Boys	Women	Girls
Ploughing	50	35	15	-
Cultivation	-	-	81	19
Manu ring	-	-	83	17
Watering	10	18	65	7
Weeding	-	5	68	27
Harvesting	-	-	74	26
Processing	5	-	78	17
Average	9.3	8.28	66.28	16.14

Source: Field Survey, 2016

Table4.12 also shows the average participation of household member's i.e. 9.3% men,8.28% boys, 66.28% women and 16.14% girls in cash crop production. In cash crop production women's and girls were averagely high participant than men and boys. Considering Agriculture, which is the backbone of economy in the developing countries like Nepal, the contribution of women in the agricultural practices from plowing of farm land up to transporting of products to homestead is extremely important. Besides, the contribution of Ethiopian women in general by assisting of their husband in many economical activities is very high. However, all those roles they play had not been recognized, because traditionally the society provides them low status.

4.2 Personal Annual Income of Rural Women

Annual income is the amount of money generated by a woman herself within a year. Income of a rural woman was measured by summing of money earned from selected ten sources, including agricultural and non-agricultural sources. It was expressed in 1,000 rupee (Nepali currency). Different income sources are presented below:

Major categories of income source	Sub-categories of income source
Agriculture	Cattle and goat rearing, poultry, aquaculture,
	vegetable cultivation, bee keeping
Non-agriculture	Small business, wage labor, tailoring, handicraft,
	street vendor

Figure 4.5: Annual Household Income of Rural Women (n = 100)

Source: Field Survey, 2016

With regard to total household income, a high variability was observed, where the majority of women fell under low to medium income categories and very few had a high income. The reason might be the lack of opportunity to get a better occupation. In the study area, household livelihood strategies of rural women are characterized by diversified farming to meet households' requirements and they are mainly dependent on agriculture, share-cropping or wage labor. Rural women in the study reported that they need markets and better road connection with Head Quarter and district levels. They felt the need for factory employment so that they can engage themselves in work during lean periods (people had no work to do in February, April, July to August, and November to December). Many of them reported that

they suffer from lack of capital during crop growing period because credit distributing procedures usually are complex and lengthy for formal government microfinance organizations. That is why they are bound to go to local loan sources such as Sahukar, microfinance NGOs, etc., for finance, all of which charge very high interest rates. Overall it is found that very specific human resource development factors, such as education, training, skills and experience are pre-requisites for raising total household income. Infrastructure facilities, electrification, local institutions and extension services also have an impact on total household income. Total household income varies greatly depending on the farm size, some background circumstances such as household size, total family members, dependence ratio of the family and number of income earners. The findings of the present study and corresponding supportive material indicate that different intervening variables influence the household income.

4.2.1 Participation in Social Activities

Participation in social activities is defined as the degree to which rural women attend different social events. It was measured by computing a 'social participation score' based on the participation in five selected social events. Scoring of participation was '2' for regularly, '1' for occasionally, and '0' for no participation. The scores of five social events were then added to calculate the total score of participation in social activities. Therefore, the participation in social activities score could vary from 0 to 8, whereby a 0 indicates 'no participation' and a 8 indicates 'regular participation'.

Social events	Patte	rn of Participatio	n
Social events	Regularly=2	Occasionally=1	Not at all=0
Family program (marriage, functions, invitation etc.)			
Voluntary help (work with people to help.)			
Negotiation (mediating quarrels among neighbors, relatives)			
Cultural program			
Attending meetings arranged by village community			

4.2.2 Participation in social activities

The participation of rural women in social activities lay mainly between low to medium, while a majority had medium participation (36%). Likewise (35%) had medium participation and very few (29) had high participation. Rural women in Nepal have low participation in social activities. Lack of participation in social activities that, might deprive rural women to get better livelihood opportunities.

Table 4.6 Extent of participation in social activities of rural women (n = 100)

Categories (Based on score)	Number of rural women
Low participation (up to 3)	35
Medium participation (4 - 5)	36
High participation (above 6)	29

Source: Field Survey, 2016

4.3 Impact of Agricultural activities on the Income of Rural Women and their Livelihood

Opinions of rural women were gathered regarding the benefits or contributions of Agricultural activities on their own income during the last three years and presented in table 4.7

Table 4.7 Perceived Change in Income of Rural Women Through Agricultural activities (n = 100)

	Frequency (n= 50)	percentage(n= 100)
Increased significantly	23	23 (23)
Increased slightly	48	48 (48)
Stayed about the same	18	18 (18)
Decreased slightly	10	11 (11)
Decreased significantly	0	0

(Values in the parentheses indicate percentage)

Source: Filed Survey, 2015

In the aggregate, only 23% of rural women observed a significant increase in their income due to participation in Agricultural activities, while 48% women found that their income

increased slightly. Only 11% of the women had slight or significant declines in their income in the last three years. However, it appeared that improved income had been experienced more often. The reasons might be the improved access of loans, technology and market facilities provided by NGO. It is also notable that none of "NGO and non NGO women" found that their income decreased significantly.

Table 4.8: Reasons for declining income of rural women during the last three year

Reasons	Number of women in
Project failure	10
Market failure	8
Interest rate of loans	17
Exposure to natural disaster	17
Prolonged illness	9
Loss of asset	8
Loss of employment	8
Loss of crops/animals	8

Source: Filed Survey, 2015

There were finally merged to eight items as the main reasons behind the decline in income of rural women during the last three years. According to the results, overall most of respondents identified project failure as the most important reason behind declined income, except the women of Magarkot, who were exposed to natural disaster recently and the women of same village also reported prolong illness as their secondary reasons. In most cases, high input prices increasing the cost of production caused the project failure reported by rural women. High loan interest was considered as the second important reasons for their declining economic condition by rural women. Market failure was another important reason. Rural women reported that market prices are not stable throughout the year, and sometimes they are bound to sell products with prices lower than production cost. The other reasons that directed income negatively were loss of asset, loss of employment and loss of crops/animals.

Table 4.9: Reasons for increased income of rural women during the last three year

(n = 100) Reasons	Number of women
Increased production in agriculture and non-agriculture	52
Increased cropping intensity	30
Increased credit facilities	46
Used better varieties in agriculture farming	29
Opportunity of new Agricultural activities	35
Enhanced ability in disaster management	10
Less pest attack	14
Increased the area of cultivation	13
Getting a new/better others	33

Source: Filed Survey, 2015

Rural women reported nine items which contributed to the increase of their income in the last three years (table 5.6.3). The majority believed that 'increased production in agriculture and non-agriculture' played a major role to increase income. Rural women reported that production of different Agricultural activities have increased significantly in recent years as a result of the availability of input such as fertilizer, insecticide, seed, vaccine, etc. The supply of improved breeds of cattle's and better treatment facilities from NGOs also contributed to increase the production of cattle and goat remarkably. The other reasons behind increased income reported by rural women included an increase in cropping intensity, credit facilities from different loan sources, better use of varieties in agriculture farming, opportunity to start new Agricultural activities, enhanced ability to disaster management, less pest attack, increased cultivation area and getting a new/better others.

4.4 Opinion of rural women regarding impact of Agricultural activities on their livelihood

Overall, rural women were asked whether there had been any changed aspect of their lives since performing Agricultural activities over the last three years. Twelve items of livelihood were selected as the major areas that changed by the increase in income and opinion of rural women are summarized in table 5.6.4

Table 4.10: Overall impact of Agricultural activities on livelihood of rural women (n =100)

Statement	Opii	Opinion of rural women (%)				
Statement	Improved	Same as before	Decreased			
Position in the family	71	15	14			
Dependency on husband	30	65	5			
Housing condition	9	76	15			
Health situation	18	75	7			
Water facilities	20	80	0			
Sanitation	19	79	2			
Food availability	47	28	25			
Participation in social activities	54	42	4			
Freedom in cash expenditure	30	63	7			
Family misery	14	9	77			
Overall livelihoods	72	15	13			

Source: Filed Survey, 2015

The majority of the rural women indicated that their livelihoods improved through participation in Agricultural activities. Participation in social activities and water facilities also increased remarkably. Many women (15%) reported that involvement with Agricultural activities does not change their livelihood status and 13% mentioned that their livelihood status in fact decreased. Loss of property due to discontinuation of income projects, unstable market prices, defaulting and the burden of loans were major reasons for the negative effects reported by women

4.5 Selection of the Best Agricultural Activities

An attempt was made to assess the best and popular agricultural activities among the women in the study area through comparing the participation of each selected agricultural activities and thus the participation index has been calculated and data have been presented in table 5.7 according to their ranking.

Table 4.11: Ranking of Agricultural activities Adopted by Rural Women

Agricultural activities	Participation index	Rank
Cattle and goat	162	Rank 1
Poultry	118	Rank 3
Aquaculture	17	Rank 8
Vegetable cultivation	146	Rank 2
Bee keeping	3	Rank 11
Banana cultivation	36	Rank 5
Mushroom farming	96	Rank 4
Fish farming	15	Rank 9
Sugarcane farming	32	Rank 6
Lemon grass farming	23	Rank 7
Tobacco farming	9	Rank 10

Source: Filed Survey, 2014

Cattle and goat rearing was the predominant agricultural activities in the study area, as the largest number of rural women (PI=162) was involved in it. But average returns from the cattle and goat rearing were found to be very low, and rural women mentioned that they were not convinced about its the economic benefits. Secondly, rural women were quite heavily involved in vegetable cultivation (PI=146), which also seems to have less benefits because of traditional ways of farming and less availability of proper marketing channels. Although mushroom farming was regarded as the lower level others it got forth rank in participation with PI=96. The number of women involved in banana cultivation and sugarcane farming was PI=36 and 32, respectively. Other Agricultural activities such as aquaculture (PI=17), tobacco farming (PI=9), fish farming (PI=15), bee keeping (PI=3) was done by only a limited number of rural women and the returns of these Agricultural activities were also low. Hence, cattle and goat farming was the most popular among the existing Agricultural activities in the study area because considerable numbers of rural women were involved and the benefit from this agricultural activities was higher compared to other Agricultural activities. Rural women informed that they could rear cattle and goats in their homestead and did not require extra land. Most of the rural women kept their goats in their living room or kitchen at night. In addition, rural women referred to their cattle and goat breeds as being well adapted to the climatic circumstances with high resistance. In the study

area cattle and goats were indigenous/local breeds, which are comparatively small in size and healthy. However, the income provided from cattle and goat farming is not satisfactory enough, because local breeds are mainly less productive and rural women followed conventional rearing methods. Most of the rural women mentioned that their cattle are fed exclusively on grass from the pastures (summer), straw, discarded water from cooked rice, and rice husk. In monsoon and winter, sometimes rice/wheat bran and very rarely bran, maize cob and oil-cakes etc., are provided. Often rural women feed their cattle the residues from the kitchen. Concentrated feedstuff or silage was not given at all, the use of any additional fodder depending on the availability of money. The milk production performance was generally very low. Milk production was 1.5 - 2 liters per day for an indigenous breed and 4 liters per day for a crossbred cow. Generally, insemination took place spontaneously by bulls of neighbors' in the villages. Very low number of rural women used artificial insemination for improving the breed. As a consequence, we can say that the supply of modern technology and improved breeds will increase the overall return from cattle and goat farming, which ultimately would increase the personal income of rural women as well as their household income.

4.5.1 Constraints Faced by Rural Women in Participating in agricultural activities

Before making suggestions on future development and formulating efficient programs for the study area the major constraints faced by rural women need to be determined. The interviewed rural women faced a variety of multi-dimensional difficulties and constraints (economic, social, and cultural/religious) that affected the participation in income activities as well as their livelihood. The view of rural women has here been ranked according to their index values. The constraint index (CI) of the 19 pre-selected constraints ranged from 103 to 290, which is presented in table 5.8.

Table 4.1.2: Rank Order of the Constraints Confronted by Rural Women in Participating In agricultural activities

	C	onstraint l	Constraint		
Constraints		medium	low	Not at all	index (CI
Inadequate finance to run In agricultural activities	91	8	1	0	290
Lack of appropriate In agricultural activities	81	17	2	0	269
Less homestead land	84	11	5	0	279
Lack of technical knowledge	73	19	15	3	262
The inability to understand training material	58	20	11	11	225
High price of agricultural and non-agricultural inputs	59	37	4	10	255
Poor infrastructure facilities- roads, bridge, markets	78	19	2	1	274
Less availability of agricultural input: fertilizer, seeds, pesticide, goats, cattle, chicks, ducklings, etc.	54	39	5	12	245
Poor health status	18	17	17	48	105
The lack of marketing channels	44	42	13	1	229
Inadequate extension agents	37	48	14	1	221
Less cooperation from husband and family	31	31	20	18	175
Social insecurity	44	40	15	1	227
Inadequate training program to run In agricultural activities	79	18	1	2	275
Natural calamities - heavy rain, flood, drought	24	7	19	48	103
Harassment during work outside	7	26	42	25	115
Religious values	12	54	21	13	165
Lack of information on In agricultural activities	65	34	1	0	264
Lack of initiative mind	16	62	22	0	194

Source: Field Survey, 2015

The most common constraint confronted by rural women is 'inadequate finance to run in agricultural activities' (as indicated by its CI of 290). In the study area, women were usually very poor and spent most of their income on food and household expenses. Consequently, they could not save enough money required to start an IGA. Credit for rural women provided by different loan sources was very small when compared to the high production costs of running an IGA. In addition, the government offers no credit schemes for the rural women in the study area to run agricultural activities. Therefore, scarcity of money was a common fact, and rural women could not conduct agricultural activities properly and were frequently reluctant to participate in income activities.

Inadequate training program to run agricultural activities was the second most commonly visible constrains of the study area. Women are not provided with the adequate trainings to run IGA from GOs and NGOs. Because of which in spite of their willingness they are facing troubles to run an agricultural activities.

'Less homestead land' was the 3rd most commonly encountered problem for the rural women. According to the report of rural women, the increasing population in the study area decreased homestead land over time, ultimately reducing the scope of vegetable cultivation around the houses, which was the most common IGA for rural women.

The fourth most important constraint was 'lack of appropriate agricultural activities'. Rural women were involved with different agricultural activities, but the income from these agricultural activities was not substantial. Rural women explained that they are more interested in getting involved with agricultural activities which require little capital, less labor and are possible to conduct in the homestead, such as handicraft and tailoring.

The problem of lacking 'technical knowledge' was another major constraint to conduct agricultural activities. Rural women indicated that they have less formal training in technical matters regarding agricultural activities, which keeps them from using technology and up-to-date information.

'The inability to understand training material due to illiteracy' was marked as the major constraint. Rural women in the study area had poor educational backgrounds, and they had difficulties for understanding the concepts behind new technologies and methods of training programs.

The high price of agricultural and non-agricultural input such as seeds, fertilizer, pesticide, chicks, ducklings, bamboo, thread, etc. was also a barrier to conducting an agricultural activity. Furthermore, less availability of agricultural input during crop growing season was acute. Poor infrastructure facilities such as earthen roads and lack of bridges created a marketing problem, and there was a lack of marketing channels. Rural women went to market on foot, and street vendors sold their products door-to-door. Most of the roads in the study area were earthen, and during monsoon they faced difficulties to travel on the muddy roads. Often, they could not reach market sites easily and in a timely manner. The public transport system was very poor, and it was impossible to use personal vehicles because of their poor economic condition. Rural women also reported that poor health status was a barrier to conducting an agricultural activity. They often suffered from diarrhea, cholera, dysentery, skin diseases, malnutrition, night blindness, and mosquito-borne diseases such as dengue fever and malaria. An inadequate number of extension agents were another stumbling block faced by rural women to conducting mainly agriculture-related agricultural activities. Rural women mentioned that cooperation from husband and family members for performing an agricultural activity is also low. In addition, they described that social insecurity, insufficient training programs, and natural calamities hindered their participation in an agricultural activity. Every year they faced disaster like drought, heavy rainfall or flood, disease infection and insect infestation, etc. As a consequence, production and sale both decreased, and sometimes rural women lost their investment on an agricultural activity. Rural women did not have enough leaflets, booklets and other information materials on agricultural activities. Therefore, supply of adequate finance, extension of potential in agricultural activities and different facilities in the study area is needed in addition with attitudinal change for increasing women's participation in agricultural activities.

4.5.2 Significance of land rights in women's empowerment

The contribution of women to agriculture and the importance of having access and control over land have been ably presented in the previous chapters. The majority of farm work is done by women in most developing countries especially the Sub-Saharan region as highlighted in chapter 2 yet societal institutions or norms limit their rights to land. Rights to land entails among others contributing towards decisions on sustainable use of land. It is thus meaningless for agricultural development if people who provide 70% of labor do not own land or have limited rights to land. The majority of women as highlighted in chapter three

belong to the matrilineal society which gives ownership of land to women in Nawalparasi District. Longwe's Women's Empowerment

Framework places control over decision making as the most important determining factor for women empowerment (March, Smyth, &Mukhopadhyay, 1999). Control over land is a strategic need for women which provides an opportunity to make other important choices for their day to day livelihood (Kabeer, 2005). For instance; women would be empowered to choose what and how to produce. This autonomy in making choices ensures ownership of activities across the value chain in agriculture. Therefore, giving women rights to access and control over land is central to the goal of poverty reduction holds.

A similar case in Chitwan, women who own land in most cases are likely to have the final say in household decision making. However, in Nawalparasi District found that husbands being heads of the house have an advantage to control decisions about land use despite women being the owners of the land. Male dominance is further exercebated by controlling powers these then defeats the assumption that ownership of land automatically results into women being empowered men still control decisions about land whether as husbands or maternal uncle.

In line with male dominance as already highlighted by the 2007 gender profile report in chapter 3, men in matrilineal societies are reluctant to invest in their spouses' land. Doss (2001) indicates the same for women in patrilineal societies though they have a comparative disadvantage with those from matrilineal societies. Men opt for wage labor instead to uphold their control over their household which has the potential of derailing efforts to invest in agriculture (Davision, 1993). In this case, institutions that regards men in these societies as 'strangers' demotivate them and yet they are the major decision makers as household heads. Therefore ownership of land by women in this scenario is useless as the men who are powerless use their decision making powerless to derail any major investments in the land.

On the other hand, poverty is still higher in female headed households in these societies despite being the major decision makers and having more land rights. According to a study by White (2007) revealed that in Nawalparasi District whether women come from matrilineal or patrilineal societies, their independent rights to land property are limited due to a combination of traditional customs and market economics. This then entails that other socioeconomic factors apart from land rights also have impact on women's participation

hence the need to address them as well (Mutangadura, 2004). Therefore, advocating for land rights for women alone would not address the needs of the women farmers. In a study in Nawalparasi District on women empowerment, found that to remove the fear of losing power to women and dispel the notion that the process aims at fighting against them, men need to be involved too. Capacity building on gender equality has to involve those holding power for sustainable transformation.

The global, regional and national initiatives to accord land rights to all people regardless of gender through reforms in relevant policies faces challenges on implementation. Though the country is signatory to regional and international conventions some of which have been highlighted in chapter 3, in most cases the laws have not been reviewed in accordance with the agreements. However, it should be noted that the country's constitution prohibits discrimination based on sex whilst upholding equality between men and women. The national initiatives should be promoted mostly with the assumption that they capture properly the needs and challenges since they are contextualised unlike global solutions (Love et al, 2006). Quisumbing&Pandolfelli (2009) argued that even where legislation to accord or protect women's rights to property is present, their ability to exercise their rights could be limited by lack of legal knowledge and poor implementation.

The institutions that exist act as barriers to the policy implementation hence translation of the land policy into implementation still is a challenge. Rocca et al (2009) noted that program strategies and policy recommendation aimed at empowering women would be in conflict with society norms and expectations that are held rigidly. Traditional norms resist structural changes to any challenge that threatens the chiefs 'authority and power since they derive them in ownership of land (Chirwa, Kydd, &Dorward, 2006). The need for challenge to these institutions is very essential as women are the major users of land for agriculture andany meaningful increase in production will not only benefit the women but the society as a whole. Women also make up the society and no gender is superior over the other hence it is imperative that every society member has equal rights to land.

4.5.3 Relevance of Women's Contribution to the Decision Making Process at

Household Level

As indicated earlier that giving women land rights alone would not empower them, their participation in economic household decision making is of paramount significance. Kabeer (2005) also noted that active involvement in decision making is an important dimension of empowerment bsssesides control over resources and benefits or achievements. This is also in line with Longwe's thinking that equal participation in decision making process about certain resources is more important than equal access to resources if women are to be empowered (March, Smyth, &Mukhopadhyay, 1999). Longwe's Empowerment Framework places control over decisions and resources in the highest order of empowerment hierarchy and stresses its importance in determining women's quality life (Lutnell et al, 2009). In tandem with these, the country through the MGDS advocates for equitable participation of women in decision making (White, 2007).

However, chapter 3 indicates that women's decision making is mainly on reproductive roles and low value crops. Yet they also provide labor to the major enterprises. As Kabeer (1999) noted, women would not be empowered if involving them in decision making is based on socially defined roles. Men as decision makers are not in most cases the implementers of the decisions due to their involvement in off farm employment which affects efficiency in implementation of the activities (Davision, 1993). This then entails that leaving out women in key decision making would jeopardize the Nawalparasi District growth and development strategy objectives which seek to orient smallholder farmers into greater agricultural commercialization. Pursuing commercial agriculture is viewed as a development strategy for growth and poverty reduction through generation of employment.

The study by Njuki et al, (2008) which revealed that women contribute freely to community decisions but not in their households shows the underutilization of women's ability in their own households. The household being the basic unit in the community is supposed to benefit by tapping from that resource.

Dealing with household decision making is a challenge for most policy makers as it appears intervening directly in intra household norms and relations which are considered private to some extent (Kabeer, 1995). Therefore, policy makers need to identify monitoring indicators for women's active participation in decision making rather than focusing on increasing

women's numbers in decision making positions. Providing women with the autonomy to make independent decisions would enable them exercise effective use of productive resources. The following section explores the need to enhance accessibility or availability of these resources to ensure women have the right resources to enhance productivity.

Box 5.8: Case illustrations of Rural Women Decision-making Ability on Cash

Expenditure

Ruk Maya Saru described that she gave some money (2,000) as a loan to her neighbor two years ago. Upon hearing this, her husband got angry and beat her. Her husband also said that he will send her back to her father's house if she does it again in future. Sometimes her husband consults about family matters such as purchasing of land, buying household assets, etc., but in each case the decisions regarding investment were always made only by him. She needs prior approval from her husband regarding any matter of decision-making, although she has freedom over daily expenditure and child education.

Tulasi Maya B.K.mentioned that decisions in the past were mostly made by her husband. Her husband never consulted with her or other female members of the family. He frequently consulted with the male members of her joint family, even with his eldest son though he was only 14 years old. Her husband believed that women were not even allowed to make their own decisions. After death of her husband, she takes decisions on cash expenditure alone, but in most cases she consults with other family members (male and female).

Muratiya Devi Mahato said that her eldest son sometimes consults with her but then takes the decisions in all aspect of family cash expenditure alone. Her eldest son and other family members thought that she does not have that much decision-making ability. Therefore, she always discusses with others before taking decisions in all cases.

TejKumariChaudhari described that before marriage she was involved with NGO and attended group meetings. After marriage, her husband insisted that she should take a loan from NGO, and she did it. When she asked about borrowing, he told her that it is my decision, when and what to borrow. Later her husband used this money in other purposes and she was marked as a defaulter by the NGO and throw out of the NGO. One month later, her husband went away and after that he did not communicate with her for the last three years. Now she can take decisions alone about family matters, and she also sometimes shares with other family members.

4.5.4 Improving Women's Access to Inputs

Women's access to and control over land besides integrating them in the decision making process are vital in the improvement of agriculture development which is their major source of livelihood. However, the production process requires inputs, a challenge also faced by men especially with the focus on market oriented production. Though men also struggle to access inputs due to high costs, the impact is more on women since they make up the majority of poor people. Women's capacity to attain their strategic needs especially in male headed households is likely to be limited if access to resources is derived from being a dependent member of the family (Kabeer, 2005). However, assumption should not be made that access to resources would lead to women's empowerment but exercising control over them (Kabeer, 1999).

The government's initiatives to address food insecurity through programs that provide free or subsidized inputs continue to yield positive results. The initiatives target vulnerable people amongst, which are women especially heading households. Targeting of female headed households does not necessarily mean they are all poor but they are prone to poverty due to limitations in access to health, education and employment opportunities. These as revealed by a study in Nawalparasi District by (IPRAD, 2003) are determinants of productivity and economic growth hence the need to place them among priority agenda.

Though the country has registered successes on the farm inputs subsidy program, the extent to which the targeted groups will still depend on the government for inputs cannot be ascertained. The program's future can also not be guaranteed as it is subjected to high risks of political influence which could change with change of governments. As earlier on noted that stability of policies in Nawalparasi District is a challenge as change in political environment affects implementation of other policies. In other words, women are not being empowered by the program to sustain themselves even beyond the life of the program.

Furthermore, the program's emphasis on maize production which is staple food denies opportunity for the women to venture into market oriented production since the aim is to address food security. Another area worth noting is the impact of the program on women in male headed households who as earlier on highlighted are side lined in household economic decision making. Doss (2001) argued that programs that target household head might disadvantage women in male headed households other than in female headed households. This is in line with what Percy (1999) noted that women in female headed households and

those in male headed households might not face the same challenges in terms of decision making. This is so because, those heading their own households are the decision makers hence have the powers to influence the direction of agricultural activities.

In the same vein, other factors like class, relative wealth, age are vital to varying levels of empowerment within women hence the need to recognize them when doing analysis (Mosedale, 2005). Therefore, development agents in the agriculture sector need to take these differences into account when designing interventions other than bringing 'a one size fits all' kind of interventions which will not address vulnerability of other women.

Similarly, the targeting of very poor women who end up as presented in chapter 3 by Gladwin et al, (2001), selling the inputs to address their immediate needs like food, needs to be revisited. Mayoux (2000) also argued that targeting based on poverty leave out other vulnerable women who might not be poor or living in poor households besides excluding women with experience and skills to foster development. Alternatively, a combination of initiatives would be ideal where their practical and strategic gender needs would be addressed.

Apart from government providing inputs either free, revolving fund or at subsidized rates, giving out of loans to women to enable them access inputs for agricultural production would be another strategy. Women become more active and assertive when accessing financial services which enable then to deal with gender inequalities or equities. NGOs in Nawalparasi District have initiated programs that aim at empowering women through providing soft loans to them which has eased the challenge of scarcity of formal financial institutions in the rural areas. However as argued by Mayoux (2000), empowerment cannot be taken as an automatic outcome of microfinance programs since it involves other factors as well. Similarly, women cannot be empowered by NGOs or development partners but themselves, and others only facilitate the process (Mosedale, 2005).

Though the loans are meant for establishment of income generating activities (Agricultural activities), investment in agriculture is minimal. To some extent as earlier own reported, women prefer off farm Agricultural activities rather than agriculture whose benefits in most cases are only accessed by men. Bryceson& Fonseca, (2006) also noted the same trend that women have tended to shift from self-sufficient unpaid labor to wage labor in the form of meela/parma (casual labor or piece work) or other off-farm activities that earn them income. According to a study in Nawalparasi District, most female headed households face food

security constraints hence income from casual labor is also rarely used to buy inputs for the farm but food.

Giving loans to women would be meaningful if they are able to exercise control over it and its benefits especially for women in male headed households. Similarly, the few women who would like to invest in agriculture might find it difficult as most of the loans are small with short periods of repayment. Most projects that target women fail because they involve small investments motivated by household welfare other than development. Hence, as argued by Longwe's Women's Empowerment Framework, initiatives that aim at improving the welfare of women are far from achieving women's empowerment (March, Smyth, &Mukhopadhyay, 1999). Benefits from agriculture are seasonal but most of the loans are weekly hence such loans would better be used for other small Agricultural activities.

Furthermore, in most cases the loans have been used on Agricultural activities that are considered for women which results in small returns (Mayoux, 2000; Kabeer, 2000). Even where women invest in agriculture, they would be comfortable to use the loan on enterprises that they have control over like horticultural crops as in Nawalparasi District more women than men grow staple foods and legumes. This practice tends to perpetuate women's poverty levels as they are not able to engage in major agricultural production that brings higher returns like cash crops production. The returns from marketing horticultural crops like legumes and vegetables are used on household needs other than their needs. Allendorf (2007) in Nepal also noted that unlike men, women are more likely to use resources put in their hands for the benefit of the household. The trend as argued by Garikipati (2007) further disempowers women as they spend the loan on enhancing household assets and incomes to which they do not have control over.

Henceforth, in line with loans as found by Littlefield, Murduch, &Hashemi (2003), achieving the Millennium Development Goals (MDGs) especially on gender equality through provision of loan records small progress as women do not invest in business only. They further noted that most of the loan caters for health, education, household emergencies and other cash needs. Provision of loans to women would be effective if household dynamics are reviewed so as to ensure that women are involved in decision making over use and benefits from such loans. In addition, linking women to markets and establishment of market infrastructure is important since they contributed to failure of women empowerment programs in Nawalparasi District.

4.6 Provision of Agricultural Extension Services in Line with Women's

4.6.1 Empowerment

The chapter has so far discussed the importance of some factors of production in fostering women's empowerment in agricultural production. The role of development agents is among other things to ensure that women acquire ability to make life choices that address both their practical and strategic gender needs (Kabeer, 1999). Green & Baden (1994) noted that due to the marginalisation of women smallholder families on access to extension advise and services, they use poor agricultural technologies.

The demand driven approach adopted in the agricultural extension policy is a positive move for women to ably identify their needs and how to address them. Participatory approaches which have been used to articulate the farmers' demands have enabled women to demand enterprises that they are entitled to without any opposition (Charman, 2008). However, caution should be taken on facilitation of these approaches as development agents can ably influence the processes to tailor the activities based on their mandate. Another barrier to effective facilitation as presented in chapter 4 is capacity of development agents on gender mainstreaming. These processes are also in line with the gender mainstreaming strategy which was endorsed at the Beijing platform for action in 1995 as it involves integrating women at all levels of program development (United Nations, 2002). However, as noted by Razavi& Miller (1995), the challenge remains translating paper commitments into practice.

The previous chapters also ably demonstrated the multiple roles that women play besides their productive roles. Therefore, the design of extension activities needs to take these roles into consideration so that they are not in conflict with time for other roles (Kabira, 1997). This then proves the significance of involving women in the design of the programs as their participation in the program would ascertained. In line with multiple roles of women farmers, research and extension agents need a coordinated effort to explore on technologies that address time constraint faced by women.

Another influencing factor to women's empowerment is the issue of access to markets. FAO, IFAD, & World Bank (2009) noted that for sustainable livelihood, access to agricultural markets

should be enhanced. This is so because even if there is an increase in production by women through other agricultural initiatives like the Agriculture subsidies but if women do not have access to markets then they will have nowhere to source income or factors of production. Kabeer (2000) access to market increases women's self-confidence and enhances their control over loans. Agricultural extension services designed to link women to agricultural markets would motivate them to actively participate in market oriented farming. The initiative promoted by development agents to provide extension services to women as groups (farmer clubs) is vital in linking them to markets. Charman (2008) indicates significance of women farmers working as groups as they benefit institutional finance and reduce marketing costs.

4.7 Summery of finding

The purpose of this study is not to go into the root cause of why women are in disadvantageous positions, as compared to men, but rather to assess the role of women in agricultural activities in Kawasoti VDC. The study has focused only on the impact of agriculture on women empowerment. The study attempted to answer the

Following basic research questions.

- What is the significance of women participation in agriculture development?
- Which national policies advance or promote women's participation in agriculture?
- What can policies do to counteract barriers to women's participation?
- What are the barriers to women participation in Nawalparasi across the value chain?

In order to deal with these basic questions, research was carried out by using descriptive study design. The total sample sizes of household respondents encompassed in the study were 100 households selected from the rural population in Kawasoti VDC Nawalparasi. They must engage in any form of agricultural activities to be a part of the study. To select representative sample from the source population of the kawasoti, formula and simple random sampling and purposive sampling techniques were used. Questionnaires were distributed to respondents and in addition key informant interviews were used as an additional instrument to collect information from different Local Government and Non-Governmental organizations.

The data generated from the survey shows that 72% of the rural women were within the age bracket of 30 - 50 years, which actually represents the economically active population. Most of the economic activities are labor-intensive and that might explain the reason why the middle-aged group formed the majority. The need for women's welfare is usually higher at this period and the needs of their growing children could also call for additional resources. The participation rate of rural women in the labor force increases with the increase of age within an age limit of 20 to 44 years, where highest participation is recorded for the age group 40 to 44. In the present study 21% of rural women belonged to the young (up to 29 years) and only 7% was old (above 50 years). Educational Background of the rural women, 13% had no education, 36% had non-formal education and 18% had elementary education up to the primary school level. Among selected rural women, 29% had education up to higher secondary school and only 4% had higher /college level education. In the rural society, girls usually take part in the household work, and parents are more willing to send boys to school for education.

The farm householder are classified into five groups on the basis of land owned by the family These are landless households (≤ 0), marginal farm households (< 1kattha), small farm households (1>20 kattha), and large farm households (>20 kattha). In the study area only four household categories were found, i.e. landless, marginal, small households and large households. Their distribution is presented in figure 6.3. The highest proportion (52%) of the rural women belonged to the 'small farm household' category, 1% to the 'landless household' and only 36% to the 'small farm household' category.

Participation of household members in livestock production also revealed that the participation of household members i.e. 85% women in clearing barn, 60% women man30% and 10% girls in milking,30% men and 45% boys in taking animal to the field, 65 % women, 25% girls in feeding animals. In average 57% women participation in livestock production. Rural women have played significant role in livestock production in developing countries and they are active participants in the livestock management such as supply of fodder, milking, protecting animals. The average participation of household member's i.e. 9.3% men, 8.28% boys, 66.28% women and 16.14% girls in cash crop production. In cash crop production women's and girls were averagely high participant than men and boys. Considering Agriculture, which is the backbone of economy in the developing countries like Nepal, the contribution of women in the agricultural

practices from plowing of farm land up to transporting of products to homestead is extremely important. Besides, the contribution of Ethiopian women in general by assisting of their husband in many economical activities is very high. However, all those roles they play had not been recognized, because traditionally the society provides them low status.

The average monthly incomes of household earned from agricultural products revealed that 35% of respondents earn below 500 and of 31.6% respondents earn 500-1000 rupees, and 33.4% respondent earn above 1000 rupees, Being rural women, most are illiterate and have no proper skill for full employment opportunity. On the other hand, qualitative information obtained through focus group discussion with rural women revealed that, on average, the annual income and expenditure trends give priority to satisfy their household basic necessities, loan payments mainly for fertilizer and improved seeds provided by agriculture office on credit And purchase of farm inputs. Moreover, With regard to total household income, a high variability was observed, where the majority of women fell under low to medium income categories and very few had a high income. The reason might be the lack of opportunity to get a better occupation. In the study area, household livelihood strategies of rural women are characterized by diversified farming to meet households' requirements and they are mainly dependent on agriculture, share-cropping or wage labor. Rural women in the study reported that they need markets and better road connection with Head Quarter and district levels.

The participation of rural women in social activities lay mainly between low to medium, while a majority had medium participation (36%). Likewise (35%) had medium participation and very few (29) had high participation. Rural women in Nepal have low participation in social activities. Lack of participation in social activities might deprive rural women to get better livelihood opportunities.

Women's involvement in decision-making and control of resources and on the amount of agricultural products to be sold reveals that 20% responded that women have the upper land, while of the respondents claimed only their husbands, while 2% responded of equal share of both spouses. Most of the Asian women have not benefited from investment and trade of Agricultural products because they have limited access to land, credit, transport, etc. Women produce 80 % of basic food staff but receive less than 10% of the credit given to men. Agricultural productivity would have been increased by 20% if women have got access to credit (USAID, 2005). As men

control all the resources, the men are the decision makers in economic, political and social issues, in addition to this society's attitudinal problem and illiteracy in the study area, has aggravated women's inequality in property right and economic development.

In the aggregate, only 23% of rural women observed a significant increase in their income due to participation in Agricultural activities, while 48% women found that their income increased slightly. Only 11% of the women had slight or significant declines in their income in the last three years. However, it appeared that improved income had been experienced more often. The reasons might be the improved access of loans, technology and market facilities provided by NGO. It is also notable that none of "NGO and non NGO" women found that their income decreased significantly. In the case of increase of income the majority believed that 'increased production in agriculture and non-agriculture' played a major role to increase income. Rural women reported that production of different Agricultural activities have increased significantly in recent years as a result of the availability of input such as fertilizer, insecticide, seed, vaccine, etc

There were finally merged to eight items as the main reasons behind the decline in income of rural women during the last three years. According to the results, overall most of respondents identified project failure as the most important reason behind declined income

The majority of the rural women indicated that their livelihoods improved through participation in Agricultural activities. Participation in social activities and water facilities also increased remarkably. Many women (15%) reported that involvement with Agricultural activities does not change their livelihood status and 13% mentioned that their livelihood status in fact decreased. Loss of property due to discontinuation of income projects, unstable market prices, defaulting and the burden of loans were major reasons for the negative effects reported by women

Selection of the best agricultural activities Cattle and goat rearing was the predominant agricultural activities in the study area, as the largest number of rural women (PI=162) was involved in it. But average returns from the cattle and goat rearing were found to be very low, and rural women mentioned that they were not convinced about its the economic benefits. Secondly, rural women were quite heavily involved in vegetable cultivation (PI=146), which also seems to have less benefits because of traditional ways of farming and less availability of proper marketing channels. Very low number of rural women used artificial insemination for improving

the breed. As a consequence, we can say that the supply of modern technology and improved breeds will increase the overall return from cattle and goat farming, which ultimately would increase the personal income of rural women as well as their household income.

In the study area the major constraints faced by rural women need to be determined. The interviewed rural women faced a variety of multi-dimensional difficulties and constraints (economic, social, and cultural/religious) that affected the participation in income activities as well as their livelihood. Rural women mentioned that cooperation from husband and family members for performing agricultural activities is also low. In addition, they described that social insecurity, insufficient training programs, and natural calamities hindered their participation in agricultural activities. Every year they faced disaster like drought, heavy rainfall or flood, disease infection and insect infestation, etc. As a consequence, production and sale both decreased, and sometimes rural women lost their investment on agricultural activities. Rural women did not have enough leaflets, booklets and other information materials on agricultural activities. Therefore, supply of adequate finance, extension of potential in agricultural activities and different facilities in the study area is needed in addition with attitudinal change for increasing women's participation in agricultural activities.

At end of study it shows that the position of addressing women are very low in IGA, education, farm size, decision making level, in other hand they are highly actives in agricultural production and non-agricultural activities which is belongs to household work. They are uses as labor force. If we need to develop on agriculture then we should empowering women in all aspect.

CHAPTER V

CONCLUSION AND RECOMMENDATION

5. Chapter Introduction

The chapter draws some vital conclusion of the study by bringing out the main findings from the issues pertaining to women's empowerment. The summary looks at major barriers to women's participation in agriculture and policy responses overtime. Furthermore, the chapters suggest some viable recommendations to ensure women's role in agriculture is recognized and that no one is discriminated based on gender.

5.1 Conclusion

End of study it shows that the position of addressing women are very low in IGA, education, farm size, decision making level, in other hand they are highly actives in agricultural production and non-agricultural activities which is belongs to household work. They are uses as labor force. If we need to develop on agriculture then we should empowering women in all aspect.

5.1.1 Current Levels of Women's Participation in Agriculture

The study has shown that women contribute more labor to agriculture than men. Women have also taken up some roles that used to be regarded as for men like household decision making especially on what and how to grow. This paper has also revealed that men dominate in cash cropping whilst women just provide labor but control food crop production.

Initiatives have been promoted but have achieved their intended objectives. Most women's empowerment interventions in Nawalparasi District have failed because they have focused on addressing practical rather than strategic gender needs. In this case, enhancing their control over decision making process over factors of production could significantly contribute towards their empowerment.

5.1.2 Barriers to Women's Participation in Agriculture

5.1.2.1 Access and control over productive resources

This paper has demonstrated that women face challenges to access productive resources more than. Women are limited in decision making over land use due to inequalities in distribution of land rightswhich affects sustainable agricultural production. Besides land, this study has revealed that women's low economic status affects their affordability of inputs on the market. Giving women credit can enhance their affordability of inputs but the challenge is that financial institutions are mostly not available in the rural area. Furthermore, procedures to obtain credit limit their ability to access it.

5.1.2.2 Institutions and Cultural Norms

This study has further revealed that the major barriers to women's empowerment or participation in agriculture are the patriarchy institutions and cultural norms that rigidly uphold men's supremacy over women. These factors put women in subordinate position to men which affects their access to and control over productive resources. Men make major economic decisions in the household at the expense of women's potential skills and knowledge. Women in male headed households are the most challenged in terms of decision making since the head of the household is given the responsibility for the decision making. Furthermore, this paper has shown that women are overburdened by reproductive, productive and community roles prescribed by societal norms. These roles sometimes are in conflict with scheduling of agriculture extension activities hence women's access to such services is also challenge.

5.1.2.3 Capacity to Advance Women's Empowerment

Inadequate capacity on gender equality by development agents limits their ability to effectively plan interventions that address women's strategic and practical needs. This study has shown that though gender responsive budgeting is essential for integration of gender into agricultural development, the responsible ministries have limited capacity in the subject.

5.1.3 Level of Policy Responses to Women's Participation in Agriculture

This paper has also revealed that institutions and societal norms are barriers to implementation of policies that aim at reducing discrimination based on sex. The authorities resist change for fear of losing power over such resources like land. The agricultural sector through its strategy on empowering women operationalizes the national gender policy which indicates the sector's will to enhance women's active participation.

Furthermore, the agriculture sector has an extension policy that promotes pluralistic and demand driven extension services which calls for articulation of demands of all members of the society regardless of gender. The policy adopts participatory methodologies to integrate women in the development discourse by ensuring that they identify their needs and suggest strategies to address those needs. The study has also revealed policy reforms on land in the country. The new land policy seeks to remove discriminatory tendencies to land use and ownership. The policy advocates for equal opportunities in inheritance of land for children regardless of sex.

However, though international and national policies exist to promote women's empowerment or reduce gender inequalities, institutions affect implementation. The structures have not been reviewed to create an enabling environment for policy implementation. Furthermore, the legal framework has been slow in response to the policy reforms which limits enforcement of policy initiatives. High illiteracy levels amongst women in Nawalparasi District affects government's initiative towards market oriented farming as they fail to cope with market dynamics. Despite the agricultural extension policy providing women an opportunity to demand services that address their needs through participatory approaches, comprehension and adoption of such technologies is a challenge.

5.2 Recommendations

The study proposes several recommendations to ensure that wosmen's empowerment initiatives are successful and sustainable. The following are just some of the recommendations made.

5.2.1 Women's Access to Services Enhancement

The country needs to ensure that women have access to services that will enable them to engage effectively in agriculture production. Market infrastructure and information should be made available to women farmers if market oriented farming is to be achieved. In line with services, the agriculture sector should ensure that there is enough capacity in terms of human resources to provide extension services to women farmers. Similarly, the sector should involve women farmers in planning of extension activities so that both practical and gender needs are addressed.

5.2.2 Capacity on gender Equality amongst Stakeholders Enhancement

The country should also ensure that capacity in gender equality is built amongst custodians of the society norms that guide institutions that perpetuate gender inequalities. Some of the authorities to be equipped with such knowledge are chiefs. Women in Nawalparasi District need to be made aware of their rights on access and control over productive resources so that they are able to make informed decisions. Furthermore, adult literacy education should be promoted especially amongst women to improve on adoption of different initiatives besides comprehending loan application procedures.

REFERENCES

- Allendorf, K. (2007). Do Women's Land Rights Promote Empowerment and Child Health in Nepal? World Development 35 (11), 1975-1988.
- Booth, A., Cammack, D., Harrigan, J., Kanyongolo, E., Mataure, M., & Ngwira, N. (2006). *Drivers of change and development*. Overseas Development Institute.
- Chanza, N. (2010). South Africa's Fourth Parliament 2nd Term: Progress
- Chirwa, E., Kydd, J., &Dorward, A. (2006). Future scenarios for agriculture
- Davison, J. (1993). Tenacious women: clinging to Banja household production in the face of changing gender relations in Malawi. *Journal of Southern African Studies*, 19 (3), 405-421Finance.
- FAO, IFAD, & World Bank.(2009). Gender in agriculture source book. Agriculture and rural development. DOI:10.1596/978-0-8213-7587-7.
- Gautam, Y., & Andersen, P. (2016). Rural livelihood diversification and household well-being: Insights from Humla, Nepal. *Journal of Rural Studies*, *44*, 239-249.
- GoM.(2007). 2007/08 budget statement. Lilongwe, Malawi: Ministry of
- Gray, L.and M. Kevane (1999). "Diminished Access, Diverted Exclusion: *Women and Land Tenure*
- Holden, Kaarhus, &Lunduka (2006). "Land policy reform: theroal of land markets and women's land rights in Malawi" *Department Of International Environment Development Studies A as (Norway)Eng*in Sub-Saharan Africa." *African Studies Review* **42**(2): 15-39.
- Kabeer, N. (1999). Resources, Agency, Achievements: Reflections on the Measurement of Women's Empowerment. Development and Change 30(1999), 435-464.
- Kabeer, N. (2000). The power to choose: Bangladeshi women and labor market decisions in London and Dhaka London and New York:

- Kabeer, N. (2001). Conflicts over credit: re-evaluating the empowerment potential of loans to women in rural Bangladesh. *World development*, 29(1), 63-84.
- Kabeer, N. (2008). Paid work, women's empowerment and gender justice: critical pathways of social change. Brighton: *Institute of Development Studies*.
- Kabira, W. (1997). Gender training of trainers: An introduction. A publication of collaboration for gender and development. *Kenya: CCGD*.
- Lastarria-Cornhiel, S. (2006). Feminisation of Agriculture: Trnds and Driving Forces.

 Background Paper for the *World Development Report 2008*.
- Littlefield, E., Murduch, J., &Hashemi, S. (2003). Is microfinance an Effective Strategy to Reach the Millenium Development Goals?
- Longwe, S., & Clark, R. (1994). Women in Development, Culture and Youth Workshop Preparatory Readings 1-3. Lusaka: *Longwe, Clark and Associates*.
- March, C., Smyth, I., &Mukhopadhyay, M. (1999).A Guide to Gender-Analysis Frameworks.Oxfam GB publishers.
- Mayoux, L. (2000). Microfinance and the Empowerment of Women. A review of the Key Issues. Geneva: International Labour Organisation.
- Mehira, R. (1997). The role of Non GovernmentalOrganisations: Charity and Empowerment.

 Annals of the American Academy of Political and Social Science 554.
- Milner, J. (2005). Agricultural and Rural Development in Nawalparasi: The Role of Policies and Policy Processes. In T. Takane, Agricultural and Rural Development in Nawalparasi: Macro and Micro Perspective. Chiba, Japan: Institute of Developing Economies.
- Mosedale, S. (2005). Assessing Women's Empowerment: Towards a Conceptual Framework. Policy Arena. Journal of International Development 17, 243-257.

- Mutangadura, G. B. (2004). Women and Land Tenure Rights in Southern Africa: A Human Rights-based Approach. Lusaka: United Nations Economic Commission for Africa.
- Percy, R. (2007). Gender Analysis and Participatory Rural Apraisal: Assessing the Current Debate through an Ethiopian Case Study Involving Agricultural Extension Work. *International Journal of Education Development*.
- Razavi, S., & Miller, C. (1995).Gender mainstreaming: A study of efforts by the UNDP, the World Bank and the ILO to institutionalise gender issues. Occasional Paper 4.
- Squire, P.J. (2003). Strategies for Enhancing Women's Full Participation in Sustainable Agricultural Development and Environmental Conservation in Sub Saharan Africa. International Agriculture and Extension Education 10(1).
- Syed, J. (2010). Reconstructing Gender Empowerment. Women Studies International Forum 33, 283-294.
- Taylor, V. (1999). Gender Mainstreaming in Development Planning. A reference Manualfor Governments and other Stakeholders. London: Commonwealth Secretariat.
- UNDP. (2010). The real Wealth of Nations: Pathways to Human Development. Human Development Report, 20th Anniversary Edition.
- United Nations. (2002). Gender Mainstreaming: An Overview. New York.

Questionnaire

Personal Information

Age(year):					
(A) Below 20 []	(B) 20-29		[]	
(C) 30-39 []		(D) 40-49		[]	
(D) 50+]				
Marital status:					
(A) Married []	((B) Unmarrie	ed	[]	
(C) Divorced []	(D) Wide	owed		[]	
Number of children:					
(A) 1-2 []	(B) 3-4	•		[]	
(C) 5-6 []	(D) 6-7			[]	
Educational Attainment	-				
(A) No formal ed	ucation			[]	
(B) Basic				[]	
(C) HS					
(D) Tertiary				[]	
(E) Professional	qualificati	on		[]	
(F) Others (spec	ify)				
The kind of agricultural	activities	you are enga	nged in?		
No of years in the agricu	ılture:				
(A)Under one	[]	(D) 5-6	[]		
(B) 1-2	[]	(E) 7+	[]		

(C) 3-4[]

Women's participation in market oriented farming

Do you o	ve any land by yourself?
Yes []	No []
If yes hov	v much lands do you owe?
What kin	ds of crops do you cultivate in your land?

Freedom in decision making in agriculture

This indicator refers to the freedom of a rural woman to various aspects of her family affairs. Eight aspects of expenditure that will be considered to measure the freedom in decision making will be as follows:

Subject for expenditure	Level of decision making			
	Herself	Together	Husband	Others
Daily expenditure				
Investment on land				
Which crops to cultivate				
About the use of fertilizers and pesticides				
About the management of land and farms				
Marketing				
Take loan and use				

Loan repayment					Ì
----------------	--	--	--	--	---

Participation in social activities

Participation in social activities is defined as the degree to which rural women attend different social events. It is important for a woman to be socially active for the empowerment of women. It will be measured by computing a 'social participation score' based on the participation in five selected social events.

Social events	Pattern of participation				
	Regularly	Occasionally	Not at all		
Family program (marriage, functions,					
invitation etc.)					
Voluntary help (work with people to help.)					
Negotiation (mediating quarrels among					
neighbors, relatives)					
Cultural program					
Attending meetings arranged by village					
community					
Mela, Parma and other kinds of agricultural					
exchange.					

Personal annual income of rural women

Annual income is the amount of money generated by a woman herself within a year. Income of a rural woman will be measured by summing of money earned from sources, including agricultural and non-agricultural sources. It will be expressed in 1,000 rupees (Nepali currency). Different income sources are presented below:

Major categories of income		Sub-categories of income source	
source			
Agriculture		Cattle and goat rearing, poultry,	
		aquaculture, vegetable cultivation,	

	bee	
	keeping	
Non-agriculture	Small business, wage labor, tailoring,	
	handicraft, street vendor	

impact of agriculture on the med	ome of fural women and their fivenhood
Opinion of rural women regardi	ng the impact of agriculture on their own income
•	women's personal income will be measured by asking
three years with 'increased signific 'decreased slightly', and 'decreased	cantly', 'increased slightly', 'stayed about the same', d significantly'.
How is your income since last thre	e years?
(a)Increased significantly [] (l	b)Increased slightly []
(c) Stayed about the same [](d)	Decreased slightly []
(e) Decreased significantly []	
Reasons for declining income of	rural women during the last three years
There will be eight items selected during the last three years.	which concerned the decline of income of rural womer
Reasons:	
(a)Project failure	[]
(b) Market failure	[]
(c)Loan interest[]	
(d)Exposure to natural disaster[]	
(e)Prolong illness	[]
(f)Loss of asset	[]
(g)Loss of employment	[]

(h)Loss of crop/a	nimal	[]					
Doggons for incr	oosing inco	omo of s	rural wam	an dur	ing the last	throo	uoors	
Reasons for incr								
Nine items will be the last three yea		which	contributed	d to ind	crease rural	women	's income d	luring
Reasons:								
(a)Increased prod	duction in ag	gricultu	re andnon-a	agricul	ture	[]		
(b)Used better va	rieties in ag	ricultur	e farming			[]		
(c)Enhanced abili	ity in disaste	ermana	gement			[]		
(d) Increased the	area of culti	vation				[]		
(e)Increased cred	lit facilities					[]		
(f) Getting a new,	/better job					[]		
(g)Increased crop	oping intens	ity				[]		
(h) Less pest atta	ck					[]		
(i) Opportunity o	f new IGAs					[]		
Participation of l	household m	embers	s in livestocl	k prod	uction			
Agricultural	Man	 [Boys	,	Wome	en	Girls	
activities	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Clearing barn								
Milking		+						
Taking animal		†						
to the field			ĺ			1		

Feeding				
Animal				
Taking Care				
of Calves				
Average				

Average household members in the above cash crop production

Agricultural activities	Degree of household members participation in percent			
	Man	Boys	Women	Girls
Ploughing				
Cultivation				
Manu ring				
Watering				
Weeding				
Harvesting				
Processing				
Average				

Ranking of Agricultural activities Adopted by Rural Women

Agricultural activities	Participation index	Rank
Cattle and goat		
Poultry		
Aquaculture		
Vegetable cultivation		
Bee keeping		
Banana cultivation		
Mushroom farming		
Fish farming		

Sugarcane farming	
Lemon grass farming	
Tobacco farming	

Rank Order of the Constraints Confronted by Rural Women in Participating In agricultural activities

	C	onstraint	Constraint		
Constraints		medium	low	Not at all	Constraint index (CI
Inadequate finance to run In agricultural					
activities					
Lack of appropriate In agricultural activities					
Less homestead land					
Lack of technical knowledge					
The inability to understand training material					
High price of agricultural and non-agricultural					
inputs					
Poor infrastructure facilities- roads, bridge,					
markets					
Less availability of agricultural input:					
fertilizer, seeds, pesticide, goats, cattle, chicks,					
ducklings, etc.					
Poor health status					
The lack of marketing channels					
Inadequate extension agents					
Less cooperation from husband and family					
Social insecurity					
Inadequate training program to run In					
agricultural activities					
Natural calamities - heavy rain, flood, drought					
Harassment during work outside					
Religious values					
Lack of information on In agricultural					
activities					
Lack of initiative mind					

Microfinance Intervention Available to Women involved in Agriculture

Which of the micro finance facility (s) is/are available to you? Tick

A. Credit [] B. Savings []
C. Savings []
Which of the facility provided by the micro finance do you enjoy or had ever enjoyed?
Do you intend to go on with it?
A) Yes [] (B) No []
Give reasons
Since when did you start benefitting from the facility?
Government policy
Do you know about any government programmes to provide any aid to female agricultural workers?
If yes, have you been benefited by the programs?
Do you know any others organizations working for such women?
If yes, can you specify the types of help they are providing?
What kinds of programs and policies do you suggest for the government to empower women is agriculture?