

CHAPTER ONE

INTRODUCTION

1.1 Background of Study

The Eastern Gangetic plains spreading across the Tarai regions of Nepal, North Bengal, and Bihar in India and North Bangladesh present a paradoxical situation in relation to agriculture, poverty and inequality. The region - home to around 600 million of the world's poorest people is characterised by fragmented landholdings, widespread landlessness, poor investments and infrastructure, out-migration and inequalities based on class, caste, ethnicity and gender (Lahiri-Dutt 2012a).

Although gifted with high levels of groundwater and large tracts of cultivable land, the region ironically houses large concentrations of the poorest people in South Asia living in fragmented, fallow lands which are largely under-irrigated and agriculturally inefficient. The region's skewed under-development is persistent across national borders despite temporal variations in policies, investments and interventions. Not surprisingly, multiple poverty mitigating projects operate here, some with a gender lens. Nonetheless, an enduring poverty persists. Recent studies indicate new agrarian crises, in particular a 'feminization of agriculture': outmigration of a young generation of men from these poorly performing agrarian economies leaving behind women with restricted access to services, infrastructure, institutions and markets to manage productive [as well as reproductive] responsibilities (Sunam and McCarthy 2015; Tamang et al. 2014; Sugden et al. 2014; Singh et al. 2013; Datta and Mishra 2011; Uprety 2008).

Moreover, Gangetic plains of Nepal known as the Tarai-Madhesh, is a region with a deeply inequitable social structure (Karn 2011; Lal 2002). Central to the reproduction of poverty in this region are the deeply entrenched semi-feudal class inequalities, with a high incidence of inequitable landlord-tenant relations. Land tenure and ownership is one of the most significant challenges facing agriculture in the Eastern Gangetic Plains (Sugden 2013, 2014). On top, much of Tarai-Madhesh is economically marginal and land inequality within communities is deeply engrained. The primary

axes of inequality is between the larger land owning farmers from the upper and middle castes and a large class of landless labourers, marginal farmers and tenants at the base of the agrarian structure (Sugden et al. 2014 and 2015).

Although gender relations have changed significantly in the region over the last few decades, particularly with respects to access to education, there are still deep rooted inequalities. Rankin (2003) argues that it is the interrelationships between spatial practices, economic strategies and gendered symbols perpetuate the unequal status of women in Nepal. Recent research in the Tarai-Madhesh region also indicate that sectoral interventions have neither served the purpose of agricultural development nor positively changed the lives of poor women and men (Lahiri-Dutt 2014, Sugden et.al 2014). A growing body of research points out traditional, old and new gender-specific challenges in agricultural in the EGPs. These include low or no land-holdings amongst women and inequitable access to agriculture extension services, infrastructure, markets and credit (Kishor et al. 2015).

More recently, growing male out-migration has resulted in new patterns of gendered vulnerability, with women often facing an increased workload, economic insecurity when remittances are sporadic and limited capacity to independently adapt to climatic and non-climatic stresses (Khanal and Watanabe 2006; Lahiri-Dutt 2014, Sugden et.al 2014). There are complexities though in the feminisation discourse. There are for example, also trends of out-migration of poor women, primarily to informal, unorganized sectors (Sunam and McCarthy 2015). Furthermore, the women who are left behind are differentiated by class, ethnicity and religion and experience quite different risks, challenges and opportunities.

1.2 Statement of the Problem

It is important however while exploring gendered constraints to accessing agricultural resources such as water, there are a whole plethora of other resources, access to which can mediate the broader process of gender empowerment. These include credit, state subsidies, and capacity for women to engage in enterprises and other activities. This must be balanced out against the constraints women face in the agricultural sector.

These constraints raise broader questions about how women themselves perceive different axes of gendered inequality, be it work burden, unequal access to resources, or unequal power in decisions. Are some forms of 'empowerment' valued more highly, and are there trade-offs involved – questions which are of critical importance when formulating women engagement strategies in the agricultural and irrigation sector. How has migration itself affected the multiple sides of the women empowerment/inequality interface?

Based on the above mentioned statement it was quite necessary to add on some more scenario of the women role in agriculture and irrigation in Sunsari district. The block of the population is not studied women role in agriculture and other livelihood in Sunsari district. Considering the above problems and facts, this research tried to analyze the answer of the following research questions:

1. What facilitates participation and empowerment of women around water and agriculture?
2. What is the role of migration in facilitating or constricting participation and empowerment of women?
3. What are the mediating factors, and how does access to or lack of access to development assistance affect overall empowerment of women?

1.3 Objectives of the Study

General objectives:

) To explore role of women in agriculture and irrigation in Sunsari district of Nepal.

Specific objectives:

) To study the driving factor of participation and empowerment of women around water and agriculture.

) To identify role of migration in facilitating or constricting participation empowerment of women.

) To explain the effects of mediating factors in empowerment of women.

1.4 Rationale of this Study

There are some rationales behind the selection of this study area. Role of women in agriculture and irrigation is widespread worldwide in general and in South Asian context in particular. There are different reasons behind the feminization of agriculture. In Nepal, particularly in Tarai area, irrigating the land by woman is very disastrous practices which are putting extra-burden and destroying personal and individual life of women as human beings. So the first rational of this study is that this disastrous practice has not been studied broadly yet by other researcher and Nepal government itself. Thus I want to know the reasons of prevailing role of women in agriculture and irrigation in Sunsari focusing Ekamba, the head end and Amaduwa, the tail end of Sitaganj branch of Sunsari-Morang main canal.

1.5 Organization of the Study

The whole thesis is organized into five chapters, including this introduction. Chapter 2 reviews the several bodies of theoretical and empirical literature which builds the analytical framework of this thesis. Chapter 3 outlines the research methodology, and shows how the present research is designed. This chapter also shows the nature of the data, site selection and different data collection tools administered in the field.

Chapter 4 presents the main body of research. It discusses the picture of research sites (Ekamba and Amaduwa) in detail, access of women in resources and women's role in agriculture and irrigation of Sunsari district. It also presents the causes of the prevalence of role of women which is triggering the women's personal life of enjoyment.

Chapter 5 is the concluding chapter which presents the conclusion of this thesis. This chapter is very important because it co-relates the conclusion with its conceptual ground.

CHAPTER TWO

LITERATURE REVIEW

2.1 Theory of Patriarchy

Given the extremes of landlessness, poverty and vulnerability in the population, livelihood security is determined not just by access to land and financial resources, but equally by viable and sustainable ecosystems and natural resources. Water in particular is critical for households to achieve food security from small and marginal holdings. In a climate with highly seasonal rainfall, accessing irrigation during the dry months is the only way households can raise productivity to levels which will meet their consumption needs. With increasingly erratic monsoons, even monsoon irrigation is required to ensure a healthy paddy crop (Suhardiman et al. 2015).

Again though, at a time of male out-migration, women are increasingly responsible for managing and accessing irrigation, and thus it is critical to understand the gendered or other constraints which households face in accessing water. Sector-specific interventions in the region, for example, to improve ground water irrigation are important in this context. However, it is not clear whether such initiatives address the complexity of gendered poverty in the region. Feminisation of agriculture has transformed women's role in agriculture suggesting that traditional approaches for engaging with women may increasingly be out of touch with the reality of evolving production relations. The activities and interventions are mainly planned and influenced by external donors and are often top down in character and are not necessarily grounded in detailed research of the realities on the ground (Mccarl 2013; Lahiri-Dutt 2012a; Sugden 2009). Attention to gender in agricultural development programmes also tends to imagine women as an unvarying group undivided by class, caste and other factors which permeate the region's economy, culture and context.

According to Walby, "Patriarchy is a system of social structures and practices, in which men dominate, oppress and exploit women". The term 'social structure' is important

because it clearly implies rejection both of the biological determinism and the notion that every man is in a dominant position and every woman in a subordinate one. Patriarchy is both a social structure and an ideology or a belief system according to which men are superior and in dominant position. She distinguishes between two different main forms of patriarchy: private and public. The former is based upon household production as the main site of women's oppression. The latter is based principally in public sites such as employment and the state (Walby, 1990:20). Under patriarchy, different kinds of violence may be used to control and subjugate women and such violence may even be considered culturally legitimate.

Different theory analyses patriarchy in different way but the discourse is subjugation and domination of female by male.

Walby (1990) has presented four theory of patriarchy very well. According to Silvia Walby Radical theory believes that “men as a group dominate women as group and are the main beneficiaries of the subordination of women. This domination is called patriarchy which is not the byproduct of any other system.” Radical feminists prefer to see gender inequality independently related to the discourse of male and female. They believe that sexuality is the major site where men dominate women and impose the notion of femininity on women. Women have not control on their own body. They are the puppet of male group.

Marxist drives the concept of gender inequality from capitalism. It believes that ‘Men’s domination over women is by product of capital’s domination over labour’. Here, family is the unit which produces benefit to capital by providing day to day care of workers like food and clean cloths and produces next generation workers (children). But in return women get no wages except maintenance from their households. This is the way a capital benefits from unequal sexual division of labor within the home. However, there are sub-variations in Marxist where one is from material basis and another is from ideological basis.

Liberal does not believe the women's subordination in terms of overarching social structure. It mainly focuses that denial of equal rights to women in education and in employment are the main concerns of women's subordination.

The fourth theory that is dual- system theory is the synthesis of Marxist and radical feminist theory. Sylvia Walby has mixed the ingredients like wage work, housework, sexuality, culture, violence and the state are the point where patriarchy rooted and get enforced.

Towards the notion of patriarchy Gerda Learner (1974) states, "Today, historical development has for the first time created the necessary conditions by which large groups of women – finally, all women– can emancipate themselves from subordination. Since women's thought has been imprisoned in a confining and erroneous patriarchal framework, the transforming of the consciousness of women about ourselves and our thought is a precondition for change. She further says, "System of patriarchy is a historic construct; it has a beginning; it will have an end. Its time seems to have nearly run its course – it no longer serves the needs of men or women and in its inextricable linkage to militarism, hierarchy, and racism it threatens the very existence of life on earth."

Gerda Learner (1974) is giving importance of history because history is such a storehouse where we can look our past and reinterpret into present. But this history from the very beginning is written by male and so they interpreted only the deeds of male.

She says that women had been participated in maintaining the oral tradition and religious and cultic functions in the preliterate period and for almost a millennium thereafter; their educational disadvantaging and their symbolic dethroning had a profound impact on their future development. According to Bevoir for women history seemed for millennia to offer only negative lessons and no precedent for the significant action heroism or liberating example. History shows that there are no women who had lived without male protection. So this interpretation about women history is, according to Bevoir is not right. In myth and fable women are presented as amazons, dragon-slayers, women with magic powers. But in real life women had no history- so they were told and they believed. And because they had no history they had no future alternatives.

About class struggle she asserts that the revolutionary ideas can be generated only when the oppressed have an alternative to the symbol and meaning system of those who dominated them. The cultures of oppressed consisted of collective memoirs of prior state of freedom and alternatives to the masters' ritual, symbol, and beliefs. But in women case this things does not matter because within women there is no oppressed and oppressor. Learner says that vast majority of women could not confirm and strengthen their humanity by references to other females in position of intellectual authority and religious leadership. Very few noblewomen are seen in the history. And when there is no precedent, one cannot imagine alternatives to the existing conditions. And so she says that denial of their history had reinforced their acceptance of ideology of patriarchal and has undermined the individual women's sense of self-worth.

Further Learner says that women of all class had less leisure time than the men due to child-rearing and family service function and what free time they had was not their own. And this is happening because of that women have educationally disadvantaged and deprived. She meant to say that thought is not based on sex but it is inherent in humanity and it can be fostered or discouraged but it cannot be restrained forever.

All most all the women before 18th century were discouraged for thinking as men. She says that creative women, writers and artists have struggled against a distorted reality. The Bible, the Greek classics and Milton all have distorted the reality of women and buried the significance of women. In 19th century women's thinking was based on eighteenth century female novelists.

She further says that women's literary voices, successfully marginalized and trivialized by the dominant male but still exists. And in stitch, embroidery and quilting women's artistic creativity expressed an alternative vision. She says that 'revolutionary thoughts' have always been based on upgrading the experience of the oppressed. In this way peasant had to learn their significance of life before challenging the feudal lords; industrial worker had become 'class-conscious', the black as 'race-conscious' before challenging their oppressor. And in this way how women has also understood the

significance of their life. But before that they have to leave the patriarchy thought and they should be women-centered.

Both above great feminist thinkers have provided the concept of patriarchy which is still working in every society in certain variation of its degree. Patriarchy is the very strong factor for the occurrences of all kinds of violence in the societies where one dominates, oppresses and subjugates other. And since the patriarchy is rampant, of course a female is always the victims for every kinds of violence occurring in the society.

2.2 Conceptual Framework

This research mainly focuses on the role of women in agriculture and irrigation. The concept for the women's role is deemed reality with the theory of patriarchy deeply rooted particularly in South Asia. The thesis builds up its concept that due to male counterparts out migration, feminization of agriculture and irrigation is very commonly prevailing everywhere. In addition, men friendly agricultural instruments also sprouted because of patriarchal society and since feminization of agriculture, irrigation practice mainly held with hard work it is a kind of putting extra burden. Further it believes since feminization of agriculture creates extra burden and work from early morning to late night.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Selection of the Research Area

Ekamba is the head and Amaduwa is tail end of Sitagunj canal in Sunsari. This irrigation scheme is implemented under the Irrigation and Water Resources Management Project (IWRMP) funded by foreign grant assistance of the World Bank (WB), along with direct contribution of Water Users Associations (WUAs) and the Government of Nepal (GoN). This project works for rehabilitation/construction of Farmer's Managed Surface irrigation sub - projects in 40 districts under Western, Mid-Western and far Western regions of Nepal and development of ground water resources. It has been working towards improving agricultural productivity while making an improvement in the irrigation facilities with the aim of supporting the national goal of reducing poverty through increased food security. The project targets transfer of the management of schemes to farmer's community of some existing agency managed irrigation projects (Kankai, Sunsari-Morang, Narayani, and Mahakali). Irrigation need of Ekamba and Amaduwa is linked with Sitagunj and Ramgunj canal under IWRMP project.

Role of women in agriculture and irrigation is rampant in the whole Madhesh. Most of the agricultural works are done by women because of male out migration in Madhesh (Tarai). Sunsari is one of the concentrated areas of Madheshi community in Nepal and most of the women depending ground water and surface water to irrigate their land and are involved in their house hold cores. Moreover, villages like Ekamba (head end of Sitaganu canal, IWRMP) and Amaduwa (tail end of Sitaganj canal, IWRMP) of Sunsari are selected as research site for data collection of this study.

3.2 Research Design

The study is primarily based on qualitative approach since the nature of the study is very sensitive issue on women discourse. The study is based on both descriptive and explanatory method. The situation about the women's role prevalence in Madhesh is

described and the different reason behind this agriculture and irrigation prevalence is explained following critical social science and feminist approach.

3.3 Sources of Data

Data refers to a collection of natural phenomena and its descriptions including the result of experience, observation or experiment. Collecting data is connecting link to the worlds of reality for the researcher. Data provides base for seeing quickly all characteristics of the chosen area. For this research, the data is gathered from both (primary and secondary) sources.

3.3.1 Primary

The primary data were collected by using interview, case history and questionnaire survey. The key informants for interview were done with social activists, women and farmers.

3.3.2 Secondary

In addition to primary source, the books, news paper, article, unpublished research, the history about Madheshi women, online portals, journal and online information and other unpublished reports will be consulted and used as secondary sources of data.

3.4 Tools and Techniques of Data Collection

Given the complex nature and multilayered issues and problems of women engagement in the family and community, field research was carried out while using a qualitative research design, particularly using 'multi-sited' ethnography as methodology. This methodological approach was particularly informed by anthropological insights (Falzon 2009; Gupta and Ferguson 1997; Marcus 1997) that explore the meaning of woman within a socially and culturally structured framework. Various tools of qualitative design were administered, intending to engage in discussions about gender relations in agricultural activities in Sunsari district of Nepal.

Qualitative data were collected from individuals in the community in a natural setting. Various techniques were employed to collect the data that included case study, key

informant interviews, personal experiences, introspective notes, life stories and informal and formal interviews that described routine, problematic movements and meanings in individual lives. To identify potential informants in the community, semi-structured interview schedule was administered to collect baseline data of the village. In each village there were 12 interviews were carried out while using random sampling method.

Key informant interviews were conducted with gate operators in the cases of IWRMP and head of WUA, farmer associations members, local political leaders, ethnic leaders, school teacher/health post in charge, women leaders, cooperative members; DADO, 'social scientist' from Sunsari-Morang Irrigation office and Input dealers. Also formal and informal interviews were carried out with villagers and other influential people in the villages in both the districts that included.

-) Head of WUA / farmer group head
-) DADO officer, person responsible for IWRMP
-) Women leaders from women groups

During the field work, case study, focus group discussion and interview methods were applied in order to generate the necessary information for this study. For all these different methods, different checklist/tools were administered for collecting the different area of information. All the discussions and interviews were recorded in tape recorder so that their valuable information would not have missed while analyzing and writing the report. The researcher was aware about that he may not be able to note and jot down all the information shared by the informants and cases. Therefore, with prior consent with them recorded the information and captured some snaps in his camera as well.

The present study is mainly based on the primary information collected through case study, interview with key informants and household survey.

3.5. Data Analysis and Interpretation

All collected information had orderly been analyzed. All information is presented descriptively and explanatorily. Qualitative data which were collected through case history, key informant interview and survey methods are analysed thematically. I have followed the descriptive and explanatory methods to interpret the collected data.

3.6 Ethical Considerations

Since the study is based on critical social science and feminist approaches, the role of women in agriculture and irrigation issue is highly sensitive so the ethical consideration is highly important. In this study, data collections were preceded only with informed consent of the informants. Informants were coned as they are free not to take part, or to withdraw from the study at any point. Data were collected and stored with no personally identifying information. The tapes of qualitative interviews are kept confidentially. All computer files are password protected to ensure confidentiality. All study participants were given information about, and access to the findings of this research as per requirement.

3.7 Limitation of the Study

The study is carried out in Ekamba and Amaduwa of Sunsari district. This study focuses on the head end (Ekamba) and the tail end (Amaduwa) of Sitagunj branch of Sunsari Morang Irrigation Project. This study covers migration, role of women and access to irrigation in Sunsari. The research has adopted ethnographic qualitative method and is also based on small area therefore the findings cannot be generalized to the whole nation.

CHAPTER FOUR

PRESENTATION AND ANALYSIS

4.1 Research Sites

In Sunsari, research explores surface water irrigation through Sitagunj canal within IWRMP project as a case study. In Sunsari this study was carried out in two field sites Ekamba and Amaduwa were considered for the study.

4.1.1 Lohani, Ekamba VDC, (Now Itahari Sub Metropolitan City-15)

With the total area of 12.5 sq. km, the population of Ekamba VDC is 8,861 including 4,149 male and 4,712 female. This area is dominated by the Tharu ethnic group. They are the majority in the VDC that is 5,846 followed by hill Brahmin 756. The total number of household in this VDC is 1,983 while the average household size is 4.47. The literacy rate of the VDC is 67.9 percent.

Lohani is also a predominantly *Tharu* village of around 160 families, including two *Sah*, *Magar*, *Sarki* and *Damai* household each. It appears that villagers are mostly dependent on agriculture and they largely grow *dhan* - paddy and *rabi fasal* (lentils). Village fields are well connected with *Sitagunj* canal, and a river called *Sukumai khola* also run through the village.

People mostly harvest two season plantation. Wheat and maize are not harvested as it requires lots of effort in the field and costs quite a lot. On top, cold water that run through canal are not helpful to have good harvest of wheat. Moreover, *Tharus* mostly use rice as daily intake and therefore not obliged to harvest wheat. Most of the families in this village are self-sufficient in terms of main grains that are rice and lentil. However, it is noteworthy that almost 75% of the land in this locality is owned by *Pahadis* especially *hill lahures* of Itahari, Dharan and Biratnagar. *Tharu* people repent that these lands were previously owned by *Tharus* only, but over the period of time they have sold out most of their lands and now they are mainly marginal land holding farmers. Villagers recall, the families who had 40 bighas of land 20 years ago have now less than half of the land and

in most of the cases, a family would have 3-5 bighas of land. People from the hilly areas especially '*lahure*' have major share of land in the village. However, these lands are cultivated by the local Tharu farmers on lease or as a share cropper.

There are also families having no land and are either dependent on the migrant's remittance or they go to work as a daily wage worker in the nearby markets such as Itahari, Jhumka and Biratnagar. There are availabilities of seasonal labour work in the village but that is mostly limited to agricultural work during planting and harvesting seasons. In addition, there are a few families who run grocery shop in the village. An extensive trend of labour migration to the Gulf countries is observed in this village. Almost all the families have one or two male persons in the Gulf countries for labour migration whereas only one person of the village is in the government job.

Settlement of village houses are scattered but close clan association is followed. Houses of immediate relatives are closely located. It can be observed that families belonging to same lineage (three generations) have their houses together at one place. *Tharus* are primarily an agricultural community hence one can find a few animals tied in their sheds next to their houses. This is usual in the sense that the families in Nepal those who are dependent on agriculture rear a few animals parallel to agriculture. *Tharus* of this area are heavy meat eaters and to fulfill the demand, most of the families keep duck, chicken, pigeon - '*parewa*' bird and goat. Also, there are quite many small and big fishponds available in the community which is owned by the villagers depending on the land a family holds. These animal husbandry and fisheries are the alternative source of income for the family which fulfils the demand of meat of the family. Most of the time, villagers sell these products especially fish during festivals time which also fulfils their own demand of fish and generate extra revenue for the family.

Especially *Tharus* celebrate '*Maghe Sankranti*' and fish is the dish that they prepare to celebrate this occasion hence this is the time when they harvest fish from their ponds. Similarly, the other big festival for them is *Tihar* in which they slaughter goat and celebrate the festival. It was interesting to learn that they do not celebrate *Dashain* as preciously as *Tihar*. In the early November while researcher was in the field, he could find farmers busy in harvesting paddy as they suggested they needed rice grain to have

beaten rice for the upcoming *Tihar* festival. It could be observed that young youth including both teenage boys and girls were quite busy in dancing practices. Basically in the night, youth used to gather together in the courtyard and practiced dancing for '*Deusi-Bhailo*'. This was indicative of gender relations in the community which was guided by equality principles. This is also a sign, that these *Tharus* are basically farmers and hence season of paddy cultivation is an appropriate time for celebrating the joy of the harvest. This is the time when new grains especially rice is harvested therefore one can see the mood of happiness and cherishment in the family after a long season of paddy plantation and cultivation. Also, apart from *Maghe Sankranti*, and *Tihar*, *Jurseetal* is another festival that they celebrate with zeal. This also correlates to the caste notion of Hindu '*Vern ashram*' where they suggest that *Brahmins* are for *gyana* and hence for *Brahmins Janai Purnima* is the festival which is precious, for *Chhetris* to have courage and protect people and for the *Chetri* it is *Dashain* that is important. For the *Vaishya* – it is business and for them it is *Tihar* that is important. Finally for the *Sudras* – the service men, is *Fagu Purnima* that they celebrate where they share love and affection.

Also, in the evening, a large number of men and women can be seen returning to their homes in bicycles from Itahari. Itahari is the commercial market which is at a distance of about 4-5 km from Ekamba. Many men and women from this area are engaged in wage based labor activities like art, carpenter, tools and machinery, construction, etc. So, on a working day, a huge number of people can be seen returning from their work to the village in the evening. Women are also engaged in agricultural works like paddy re-plantation, weeding, sowing etc. activities. In a few families, without male members women also spade the land for irrigation and so on. However, ploughing is only done by male members. A household without a male member often hire labour to plough the field and less labour intensive work is done by female members.

Women's status in the society is improved one in Ekamba compared to the other research sites. Ekamba being a Tharu community, female folks are experiencing greater freedom in terms of mobility. Young girls and ladies are found riding bicycle to commute to daily wage work in the nearby market. This has also contributed in income generation and a greater level of independence. However, work burden demonstrate no change. It is true

that women have share in productive activities but this does not mean that they can escape from household activities. Women keep on doing work from the early morning to late evening. They don't have time to gather and play cards like most men do, which is at times also not culturally desirable for women to do. Nevertheless, at times young ladies too find time to play cards. The reproductive activities like cooking, cleaning, washing, household maintenance, child caring, etc. all belong to female. Women manage their time to perform all the activities be it productive, reproductive, social or agriculture related.

4.1.2 Kharitole, Amaduwa VDC

Amaduwa VDC is located at the South East corner of Sunsari district, the tail end of the Sitagunj canal. This is situated at the border of Nepal and India. The total population of the VDC is 9,216 out of which 4,699 are male and 4,517 female. This locality is also a predominantly *Tharu* community with 2,732 followed by Muslim 738. Amaduwa VDC is spread out in 19.9 sq. km area with 1,837 households. The average household size is 5.02 while literacy rate is 53.5 percent.

Tharus of Kharhitole say that they belong to the lineage of the *Tharus* of Rajbiraj. Ladies like to call them '*puchhar tharuni*' and make joke of self. This is a particular type of dress pattern where they put a lungi (white cloth) or a *saya* (petticoat) and cover it with white sheet or a sari. Half body they cover with a sari up until shoulder and cover their chest with a blouse while lower abdomen they keep uncovered. Although a few ladies would cover their lower abdomen with sari as well while covering around hip and keep a tail on the back and that is how they call themselves *puchar tharuni* who basically called as Rajgariya *Tharu*, initially belonging to Rajbiraj of Saptari. However, in this community there are also Saptariya and Amariya *Tharu*, along with one Yadav, a few Amat and Krishidev (Dalit-Musahar) households.

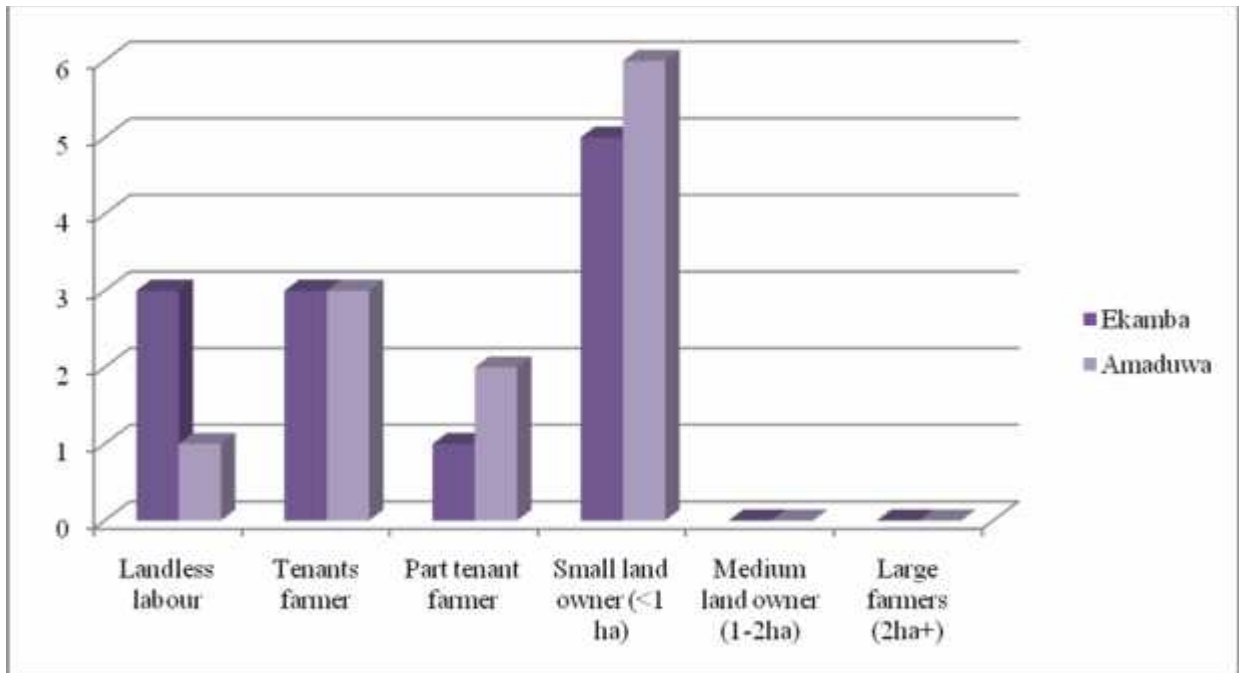
In the village one can see only the remains of the structure of canal which runs through *Tharu* land. Most of the people say that they have not collected the compensation of the land from the irrigation department yet and as water does not run in the canal they had decided to work out land for farming than to leave it as abandoned structure of canal. Nevertheless, a few people also agree that they have collected their compensation and complain that people are such that they have deleted the structure of canal itself. They

question how it will be re-managed. At present most of the structure of tertiary is not visible in the village. However main canal can be seen redundant as it has not been cleared for years. At places, farmers have removed soil from canal bed and have made it a farming land to cultivate. Many others have built houses besides the canal bed and a few have filled the canal track with soil.

Most of the people who had encroached canal land suggested that water does not flow through canal, since there is no point keeping the land barren. They have therefore claimed their land and started ploughing it. Some of them argue that they want their land back from the irrigation department as ownership of canal land was done through land acquisition but not used for the said purpose. On the other hand, people also talk about renovation of canal and if it is done whereby water will flow through canal for irrigation, people would be able to clear their houses from the track or clear the track that is filled with soil. People give example of clearing canal track and bed at both the sides on the main canal from Khanar to Chatara where department of irrigation bulldozed brick made pakka houses as well.

Amaduwa also comprises of *Tharus* in high number while some of the people are involved in small business, a chunk of others are farmers. Farmers of the village suggest that the agricultural growth in this village is in deteriorating graph as they do not have alternative irrigation system apart from pump set which is costly and the whole area is suffering from draught since last few years. There are out migration in the village but relatively less than Ekamba. The main reason of migration to the Gulf countries, as people suggest is due to farming related issues as well as unemployment. Below presented bar diagram as figure-1 presents land ownership pattern of surveyed households in Ekamba and Amaduwa.

Figure 1: Land ownership pattern in Ekamba and Amaduwa



In both the villages, people suggested that household with 2 *bighas* of land can feed six family members and on top they sell on an average 100 *mana* of rice grain of NPR 100 thousand. However, household data suggests that out of 12 households interviewed, none fall under large or medium farmer categories. Data indicate that a large 42% of the households are small farmers with less than 1 hectare of land.

4.2 Access to Economic Resources, Enterprise Opportunities and Empowerment

It is important to note that in spite of the significant increase in workload for women and greater hardship faced due to out-migration, women's access to economic resources has

risen considerably when compared to the past. These opportunities are transforming livelihood options as well as gender relations at a time of agrarian stress.

Faced with a crippling work burden, the way out to achieve equality as many women perceives, was through education and financial security. Women often compared themselves as backward in relation to urban women who supposedly were educated and financially independent. It appeared that women performed well if they were pushed in such a situation whereby they had no option other than to earn and contribute to family resources given the persisting demand of a global consumeristic economy. Increasing migration of male family member has directly and/or indirectly created space for the women to explore the way in which they could contribute to livelihood means of the family. This indicates that the agency of women has transformed in recent years.

In Amaduwa as well as in Ekamba, small scale enterprise development is seen as one of the emerging trend through which women engage in income generating activities. Many women from the locality were found involved either in preparing and selling liquor in the case of Amaduwa or having small grocery or tea shops in Ekamba.

This can have various interpretations, yet it is clear that whatever it may be, women of these remote villages were much more interested in income generating activities apart from their gender roles decided traditionally – in spite of the high workload. For instance, it can be argued that women who produced and sold alcohol were economically empowered and had access to income generation. But women whose husband were alcoholic, for them it was more family responsibilities and increased work burden because of their husbands being irresponsible towards the needs of the family, thus forcing their wives to be the household head. In either situation, women were the one who contributed more to the family livelihood means.

Most of the women, in both the VDCs, were found engaged in micro credit and saving programmes. In Amaduwa, some female respondents were engaged in three or four micro credit programs. The major benefit they received was easy access to loan and secure saving. One of the female respondent reported how her house situation had changed after being a member in a micro credit and saving program. She said: *'Her husband was an*

alcoholic previously, but micro credit loan has compelled him to work and save. Now he spends more time in work because we have to pay loan in-time. We used to have many quarrels earlier but now both of us are engaged in economic activities and have changed our behavior that is towards progress.'

Moreover, in both villages, at least the researched sites exhibited an empowered position of women. One reason for this was increasing number of women being engaged in productive areas. Women were engaged in trading activities, tea shops and even worked as a wage laborer and selling of vegetables. In Ekamba women actively interacted with their customers and performed simple cash calculations that allowed them to run their shop independently. Women gave an impression that they were moving towards becoming self-reliant in earning and handling their livelihood needs. It was also impressive to note that costumers who visited tea shops were mostly male and these women were able to handle the situation and do business smoothly. *Hattiya* was another place in villages where local products were sold. 90% of the vendors in Hattiya were women.

This suggests of a new culture emerging within gendered role division. Given the complex intersectionality between space, normative gender beliefs, and individual practices within the culture and society, it is yet not clear how access to markets generally and access to credit specifically helps in guaranteeing social opportunity transforming to empowerment, although, in certain circumstances they may be a crucial ingredient for it. Study clearly indicated that cultural ideologies, and various ways in which women articulate the process of macroeconomic change, particularly play an important role in restructuring opportunities for women. Cultural ideology in many sense appeared in flux. The focus was on economic wellbeing and quality livelihood. This was being practiced through micro enterprises and macro credit mechanisms that were available to women in the community. To compete with the demands of these micro saving and credit institutions, women continuously put more labour and effort to generate income. It was this reason that women went extra miles in terms of putting labour effort, whether be it farming or other income generating activities.

As pointed out in previous sections, quality of life through improvement in livelihood means can be seen as a compulsion of global market economy and the growing consumeristic values that it brings with it. Sita of Amaduwa was an active lady in her women's group called Chandra Mukhi Samuha. Chandra Mukhi Samuha is a micro finance initiative where rural women are encouraged to do saving in monthly installments. Sita talked about empowerment that was taking place in women. She suggested that empowerment was infused by the desire to have money, educate their children in the private boarding schools and earn land as a resource for long term livelihoods.

Sita said, *'She is an active member in the group. Everybody in the group work competitively. Whatever work they can do, they are engaged in it, including, making liquor, keeping rooster, rearing animal including buffalo, goat etc. or if there is daily wage work in the village they do that work as well'. "Sab Jidda – Jiddi main kambe chai – It is about earning in competition with one another. But from this village Tharu ladies hardly go to Biratnagar for work.'*

Sita had bought a few *kattha* of land in her name. Some money Sita got from her husband who worked in Biratnagar as a construction worker, other she got as loan from the microcredit where she is a member. She sold one buffalo and put all money together and bought 2 *kattha* of land. She happily expressed that her husband himself told and allowed her to have land registered in Sita's name. This was also an acknowledgement of Sita's hard work and contribution to the total amount of money to buy the land. Also, as land was registered in her name, they paid less tax than otherwise they would have, if registered in the name of a male member. Sita said she did farming in 25 *kattha* of which 8 *kattha* she owned.

At another occasion, when researcher asked a lady informant, who is the guardian of your family? The women replied, *'both of us (husband) are the guardian of our house'*. However she said, *'right now, women are more forward than men as they have been involved in saving credit activities with different saving and credit and finance institutions'*. Most of the women in the village suggested that on an average they maintained at least Rs. 15-20 thousand saving. The men and women both worked

together to clear loan. Especially the women of Amaduwa prepared rice wine and sold it in the local market. On an average, a woman prepares 10-15 bottles of wine in a day and sells it at a cost of Rs. 50 a bottle.

At another instance, Kamal Chaudhari, a 29 years old woman put her story remarkably, In reply to a question - what you do so that there would be development?, Kamal responded in laughter. She replied, *“We can only think of development when all children compulsorily go to balbikash. If they do not have note book and pencil, provide them with these basic materials. If we can educate our children than only we can think of development.”*

At first instance one may wonder from where she was coming but later it appeared that it was Kamal’s learning while being a member of the management committee of the Balbikash Vidyalaya Byabasthapan Samiti (Early child care development centre). She explained how she learned while being a management committee member to run Balbikash Kendra. She said, *“I had taken training of various types. Even at times I used to keep my daughter at my mother’s place and participated in training. Trainings were mostly provided by World-Vision an INGO which was supporting child care centers in the district of Sunsari.”* She recalled, *“As I am out spoken, I got selected by village women as a member of the management committee. While being in the committee, I was provided with various training including first aid training, training on upgrading the quality of education in the school.”*

She recalled that from the training she saved money and bought *paijo* (ornament women tie to her bottom ankle of leg). *“This was the time when I started thinking that if I get engaged in earning, I would be able to contribute to the family livelihood as well as I will have capacity to decide over my own needs and I can spend accordingly. Saving from training gave me confidence and hope that I can do a lot more and earn. A saying, previously talked by ladies in the village became a reflective ground.”*

“Bhaiga ka kiye jebe, Gal Baja aa raj kar, Dail chaur khoij ka la aa kho”. *“Why you run away from your husband’s house. Give heavy reply and argue if there is an issue in the family and win it. Search for lentil and rice, cook and enjoy. Why you need to escape?”*

Basically there is an old saying she had heard while being a girl child in her village. This saying was often used if an old lady had to convince a young one to return to her husband's house, while after an argument or due to domestic violence that would have taken place at her husband's house and the young lady if have opted to return to her mother's house. While giving reference of the saying aged one used to convince and motivate young ladies to act as if it was her own house and she should have influenced to run the house. This is her kingdom and she should rule it. How to do it is to argue and argue loudly so that others become party to your argument and thus you would be able to rule.

In this case, Kamal was referring to love marriage which in-laws did not accept for a long time. Hence she had no other option than to be isolated in the family. It was this old saying that drawn her to reflect and helped her to gain her space in the family. In this instance talking and arguing gave her confidence and respect in the family. She said, she had a long interest to open a shop. Therefore she first started collecting stuff from Jogbani (India) and delivered it to the shops in the local market in Itahari and surrounding areas. Later she realized that she was not getting enough commission to sell her products as she was carrying a risky job while transporting stuff illegally from other side of the boarder. Hence she decided to open grocery shop next to her house. She called her migrant husband from Malaysia for a holiday and took his help to initiate a grocery shop next to her house. She repented, she would not have called her husband but her in-laws did not give her space to open the shop but agreed when her husband came. This is how she became successful in organizing her life and livelihood.

This indicates a growing concern for women's priority to have access to finance – priority is on moving towards a better lifestyle by setting up enterprises etc. Although, while engaging in income generating activities, they are indirectly empowered to take decisions, yet decision making as such is less of a concern and workload is not considered a problem. Access to land is also considered a priority – particularly buying new land in women's name. Fear of husbands marrying someone else, access to higher loans etc. appeared facilitating. Furthermore there is a hope of having better livelihood options for the coming generation hidden in it which guide women invisibly.

This gives a glimpse in which it might be in a very shuttle way but there is change that is taking place in the society. When these ladies were talking about ‘standing in front of men or people’ they were indicating of how they were becoming equal to each other. In deep sense, they were talking about how a culture of silence that was there in the society was broken. In this sense, it was confidence, and a feeling of equality that might relate to empowerment. This is of course more than women’s access to economy and decision making what they see a byproduct of it. Hence empowerment relates to various notions. For instance, for the women in Amaduwa, it is about ownership of resources and contribution in income generation. However, in many ways these various factors are complementary to each other in which we may be able to understand what empowerment is.

4.3 Remittance and Empowerment

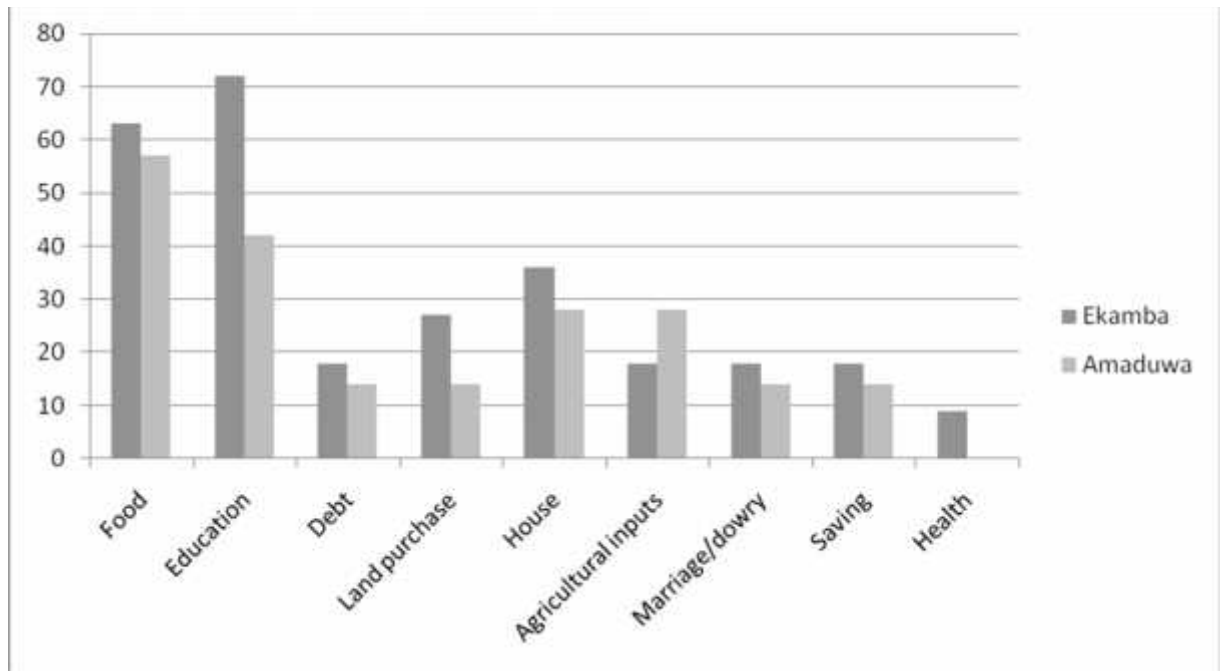
Access to remittance has also been important in providing economic opportunities to women. Household survey suggest that remittance money is mostly spent on family related matters including education of children, loan payment, house construction, marriage of siblings and other livelihood needs. However, it is again case specific – in some cases it has been diverted into productive uses. Data suggests that in Sunsari, almost 80 percent of migrant cash is spent on food and education of children, paying back loans, and only 20 percent money is spent on building houses and purchasing land. In Sunsari, remittance was also saved, which could be used to invest in micro-enterprises. Education was also a significant expense in all the communities, and represented as a long term investment of financial resources for the upliftment of future generation.

Table 1: Migration Patterns in Ekamba and Amaduwa

Type of migration		Age group		Marital status		Remittance spent on
Permanent	17	21-30	10	Married	13	Education
Seasonal	1	31-40	4	Unmarried	8	Loan payment
		41-50	7			Food
						Home construction
						Marriage and festivals

Figure two gives a comparison where remittance was spent in Ekamba and Amaduwa.

Figure 2: How remittance is spent?



4.4 Gender and Access to Water

It is clear that remittance and access to credit and markets have in many contexts transformed gender relations in Sunsari. However, gender empowerment in agriculture appears to lag behind, in spite of the fact that women are increasingly in-charge of agricultural production. It is crucial to note that regardless of various economic opportunities, households still depend on agriculture to fulfill a large portion of their minimum subsistence needs – in particular, to ensure food security. Furthermore, as noted above, not all women had same access to economic opportunities as others, with structural constraints to accessing credit or even remittances.

On top, one of the most critical challenges for livelihood security through agriculture is access to water. This is reflected repeatedly by informants. Irrigation related works are seen as masculine entity therefore women hardly get engaged in irrigating fields, except

to perform a job of a subordinate. Women from migrant families suggest that when it comes to irrigation they are largely dependent on their close kin such as farther-in-law, or brother-in-laws. To some extent this affects farming for women headed households. At times these households hire men laborers to meet irrigation needs. This makes farming expensive for them. On several occasions, these female headed households get support from close male relatives at the end of a harvesting season, because those who provide support would harvest their field in the beginning. This often leads to late farming resulting in less product. It is reported that at times, especially women headed households keep part of their land barren due to various reasons explained above. This has also affected tenant farming. Most of these female headed migrant households are compelled to abandon tenant farming. In a situation where it is difficult for women to spare time for farming, they do not see an advantage in working hard in others land which would not give them appropriate return.

The constraints for women to have easy access to irrigation in the case of groundwater dependent communities are furthermore complex. A primary challenge is seen in terms of accessing a pump set and tube well, particularly for poorer farmers who do not own their own land or pumping equipment. Traditionally men would be responsible for negotiating with a richer neighbour to rent a pump. But for households with no adult male members, the task of finding a pump set for irrigation is increasingly falling into the domain of women.

In the case of Amaduwa for example, an alternative to surface water, a few farmers had invested in pump set and tube wells to irrigate their field. A lady, head of household shared her experience to irrigate her paddy field. *“This year (paddy plantation time) it was drought for three months. Government did nothing to help farmers. I faced a lot of hurdles for paddy plantation. Finally, I decided to buy pump set in Rs.20,000 and for motor I spent Rs. 6,000. It is costly to do farming just in 2 bigha of land and if I add fuel cost, it becomes very expensive. I could do it only because my father-in-law took responsibility to get pump equipment from India and helped me to find out skilled worker to fix pump set. Finally I could irrigate my paddy field.”*

The process of installing as well as managing a pump set is time consuming. As expressed above, traditionally male would be responsible for this job. But for the families where there was no male support due to labour migration, female member had to take initiation. One women informant from Amaduwa, who received limited water from the canal, complained, *“For agriculture, there is no irrigation. We have to depend on boring water which I hire from others. I have to pay Rs. 70 per hour and the fuel is also costly. Before migration, my husband used to oversee irrigation and the arrangement of rental pump. But now I have to spend extra time for managing irrigation in the field. My husband used to do ploughing and sowing also. But now I need to hire laborers and tractors for these. Sometimes, I ask help from my father in law for sowing the field. But it is not easy as it seems. Sometimes, I have to call for four or five times. If they don’t come, I have to do it myself.”*

Above explored narratives are reflective of how and what is at place in terms of irrigation and whether women farmers are having access to water. Drawing from various narratives, it can be argued that purchasing water from water market appear complex. For women to get water from water market requires maintaining social relationships even though a rent is paid for irrigation. On top, maintaining social relationship becomes difficult due to cultural reasons when water market is owned by a male. It turns problematic in the sense that negotiation to purchase water especially takes place in public sphere (tea shops/male gathering place etc.) which is not welcoming for women. It was this reason that women who had to purchase water from others felt difficulty to do so.

Although, there are provisions for subsidy and discount by the government , targeting a socially disadvantaged minority group including women in terms of installing irrigation facilities and to support farmers with appropriate technical input. But most of these available services are either confined to district headquarters or limited to a few influential individuals especially those who have appropriate network with powerful district level political groups; or those who can influence in the process otherwise. Of course, in this process of accessing services, it appears as if women feel much isolated to compete given the household livelihood management responsibility added to them.

4.5 State Canal Irrigation Interventions

In spite of the challenges faced by women in accessing irrigation, there is a large scale government irrigation projects in the study sites which is focused on both technical and institutional interventions. However it is important to ask whether these interventions are improving access to irrigation, particularly for women.

The Irrigation and Water Resources Management Project (IWRMP) in Sunsari is focused on establishment of Water User's Associations (WUAs) to deliver irrigation facilities and services to the farmers. An emphasis is on rehabilitation and construction of Farmer's Managed Surface Irrigation System that is implemented in Sunsari - Morang under its Eastern region sub-project. Irrigation Department's Sunsari Morang Irrigation Project (SMIP) functions as a sub project through which IWRMP is implemented in the Eastern region (DoI Report 2008).

Basically Sunsari Morang Irrigation Project (SMIP) is a part of Irrigation and Water Resources Management Project (IWRMP) implemented with the foreign assistance of the World Bank (WB), along with direct contribution of Water Users Associations (WUAs) and the Government of Nepal (GoN). It is working towards improving agricultural productivity through improved irrigation facilities in the area with the aim of supporting national goal to reduce poverty through increased food security. Sitaganj secondary canal that starts from Chatara – (Koshi) Sunsari covers a total length of 14.34 km with 7,985 hectare farming land in its command area. The canal track is spread in 10 VDCs of South Sunsari starting from Ekamba and concluding at Amaduwa, including Chandbela, Matheli, Aurabani, Simaria, Satarejhora , Chhitha, Chimadi, Amahibelaha (Report - Sunsari Morang Irrigation Development Committee 2015).

According to the officials (like Benu Poudel, Senior Social Scientist; Manohar Shah, Chief of Sitaganj canal and Madhukar Pd. Rajbhandari, Chief of SMIP) at the irrigation office in Biratnagar, IWRMP is a project that seeks to improve the framework for sustainable water management through institutional provisions, strengthening operational guidelines, amendment in prevailing act and rules, policy improvement program for restructuring and policy uniformity. These officials claim an improvement in water management while incorporating Water User Associations in water management process.

Especially, in this catchment area of Sunsari-Morang project, programme is implemented while forming Water User's Group at each tertiary canal level. This finally forms Water User Committee in the VDC. It gets consolidated at district level as Water User's Association a mechanism through which irrigation scheme is implemented and managed. This is the model that seeks to transfer management of the scheme to grassroots level where existing farmer's community manage irrigation project. Of course, technical support is provided by the Sunsari Morang Irrigation Project. Tertiary canal operators, sub-engineers and engineers are put in place for proper day to day operation of the Canal (drawn from interviews with officials of Irrigation Department, Biratnagar, 2015).

4.6 Institutional Failures in Canal Irrigation

The most apparent however is that many of the challenges with existing interventions are not rooted only in gendered constraints, but in broader political economic processes and institutional weaknesses in the implementation and design of programmes. Various issues faced and the risks involved while accessing irrigation are explicitly expressed by the informants.

4.6.1 Farmers' Dissatisfaction over Supply of Water

First and for most, farmers express their dissatisfaction over irrigation facilities that are designed for agricultural achievement. For instance, Lal Bahadur Karki, a resident and a farmer from Amaduwa had his own issues when it came to water and irrigation in the field. He explained, *"It would have added to our hope for farming, if there was water in the canal. It would support farming and add proportionately to production, if we could put water in our farm in the interval of fifteen days. See this time it did not rain and of course we do not get water in our canal these days. I am 75years old and my son who is in police job is not here. I cannot go and transport diesel from India because I cannot ride bicycle. Due to this reason even though I have pump set, I was not able to put water in our paddy plantation on time. I put water only twice and see I could not produce grain as I would have. See if there would be canal water, it would help to increase the product and it would be at minimum cost."*

This narrative suggests a situation of helplessness experienced by many farmers in this VDC. More than water flowing into canal, people were concerned of how to do farming

while using other means such as shallow tube-well to irrigate land. People claimed that shortage of water in the canal is aggravated also due to non-functioning of user committees that was formed under IWRMP project earlier.

Mr. Sitaram Chaudhary, chair of Amaduwa North Water User's Group, said that *'None of the group is functional in Amaduwa. Five members committee is formed with one female member but it is just for the sake of provision and nothing beyond that. There is rule and regulations of water consumption but nobody abided by that in the past. When water used to run in the canal, influential, and powerful people used to direct water to their fields whatever volume they wanted. The norms were not followed by the farmers in practice. The farmers of Northern side did not allow water to go ahead to the South without irrigating their lands on tail.'*

There are farmers as well as Water User's Group (WUG) in the record. In every two years representatives of the user's group get selected. However, these members have no role to perform, except to vote in district level Water User's Committee. Mr. Dhanuklal Tharu, Chairperson of Amaduwa South Water User's Group said, *"There are WUAs of 5 members with one female member. But none of these are functional from the very beginning when it was formed. Members did not attend the meetings regularly and farmers also did not give payments. There arises internal conflict among farmers of this area when it comes to the functioning of the group. If all farmers get united, pay their tariffs to government on time, may be that Irrigation Department would listen to our voices. Government built a canal irrigation system for the farmers but all we are not getting benefit."*

Hence, there remains a growing discontent on behalf of the farmers when it comes to irrigation facilities and its management. A concern for equitable distribution of water through canal for irrigation is raised continuously. Moreover, it points towards an inefficient mechanism through which equity issues were to be achieved.

4.6.2 Non-functioning Committees

IWRMP along with DoI, GoN is responsible for developing irrigation facilities and delivering services in the area. However, its presence is limited to the formation of

WUGs and WUAs and overseeing water flow in the canal that only run half way through. It was learned that within IWRMP project a priority of budget allocation is on infrastructure development rather than to the institutional development. Furthermore, officials claim that gender component has been included as a donor focus which has little ownership on behalf of the authorities in the project who manages it. FMIS is overloaded by infrastructural development and therefore representation of women is limited to tokenistic in nature.

Mr. Ramesh Lal Karn, a civil engineer from the Central Coordination Committee of Water Users, Chatara Main Canal, Sunsari Morang Irrigation Office, Biratnagar, pointed out about the weakness of Water User Association (WUAs) in this way, *“The problem is that farmers do not obey the norms of WUA. There is provision of fine charges too for those disobeying the rules regarding water use, but farmers are not afraid of that. People have no interest in participating in WUA meetings. In some cases, the chairperson of WUA himself breaks the rule and misuses position. Hence WUA management is in ruin. The management of WUA by IWRMP is not possible. Staffs of IWRMP are not always present in the village. This is local community matter and security people have major responsibility to settle it.”*

Although Integrated Water Resource Management (IWRM) concept incorporates gender at local level while using gender – sensitive, inclusive and pro-poor approach. Yet, the plans and policies regarding water management in Sunsari seem not functioning. Data from the field suggest that programmes concerning women’s engagement in institutions and access to services are none functional, at least in the case of two villages of Sunsari where this study was carried out. Also this is the case across the board throughout Sunsari as irrigation engineer pointed out earlier.

Concerns are more explicitly expressed by many WUGs members, chair persons and farmers. One of the informants, also chairperson of the WUAs of Amaduwa explained about access to services and villager’s engagement in implementing IWRMP project on the ground. He said, *‘I was also present during the time of Sunsari Morang canal construction. The water course were developed determining specific time and revolutionary pattern for the outlet of water into the agricultural lands. But farmers*

started illegal encroachment in the canal by directing all the canal water only to their own lands. When farmers in the head part of canal started constructing pipes illegally, it became impossible for water to reach until the end. We collected villagers from 4, 5 VDCs and aggressively protested about this practice and also made complains in the DoI office for not taking action against illegal activities that was taking place to divert canal water. We demanded the availability of water but nothing is done until now. Also last year the committee held meeting for same issue but again situation became worse because villagers in upper level like Amahibella protested; a conflict like situation emerged’.

This suggests that in reality no one is ready to irrigate in a sympathetic way. On top, IWRMP officials appear helpless to reach out to farmer except delivering water to the canal. There is unequal distribution of water in the field due to passive presence of WUA and WUGs. This ultimately contributes to the lack of access to services on behalf of farmers in the village. Moreover, it seems that in a context of conflict for water, it is difficult for officials to reach out to the farmers as there would be a demand for water. This contributes further in terms of lack of information sharing regarding other institutional capacity building opportunities as well as resources and facilities that are available for the farmers through Government departments and IWRMP project. This has created a situation whereby only influential farmers and middlemen from the community can reach out to the district office for other benefits and ultimately marginal farmers feel ignored in the process.

For instance, informants ranging from big farmers to marginal and middle one explained that they had managed irrigation without any help provided by public institutions. One of the big farmer said, *“I have 20 bigha of land. For irrigation, I have kept one boring next to my home. Since last ten years, I am dependent on groundwater for irrigation. I put application many times in DoI for services and subsidies regarding irrigation facilities. But I am getting no support. We can sense that the water level is also decreasing and there are leakage problems also but irrigation department is not helping us.”*

Similar concerns were raised by several other farmers in the village. For instance, a medium level farmer said, *‘The person having more than 2 bigha of land should think*

how to do farming’. He continued *‘Farming is increasingly becoming costly. You have to buy a water pump in 22,000, section pipe in 8,000 and delivery pipe in 8,000 NPR and fuel Rs. 110 per liter. It costs Rs 200 per kattha each time to plough the field with tractor. So, farming is very difficult for normal farmer.’*

On another occasion Basant shared that out of 4 *bighas* of land that his family owned, one and half *bigha* was being irrigated from Tengra River but the rest two and half *bighas* of land needed to be irrigated by deep ground water boarding. When asked whether he had approached IWRMP office to seek support for tube-well installation, he replied, *“There is no such provision for individual farmers. We have not received any support from district irrigation office or IWRMP office”*. He continued, *‘To buy a pump set in Nepal is too expensive and to get a pump set from India costs around 30-35 thousand at a go. Many farmers in this village cannot think of affording it at a time’*.

Of course government is not present anyway to help farmers in this area. The blame is towards IWRMP project as they are the core public service provider in the area. Situation is much more depriving when it comes to female headed households as discussed in previous sections where irrigation related matter is seen as a concern of men. On top with little participation of women in WUGs, it is further complicated to access public service facilities. This makes it next to impossible where women have to approach district office with the help of a middle man.

Essentially, a combination of state and national level political instability and neo-liberal restructuring has led to the emergence of state development institutions which are increasingly weak, with limited dissemination of new agricultural technologies (Sugden et al., 2014). Particularly in Nepal, economic restructuring and pressure to reduce fiscal deficits has reduced government investment in agricultural service centers. Across Nepal including Tarai- Madhesh, a vacuum that is created by economic restructuring has been filled by a plethora of NGOs which in many cases lack coordination and is limited in geographical scope (Blaikie et al., 2001).

Findings from household survey also suggest similar trend in Sunsari as reflected elsewhere. People feel ambiguous regarding irrigation facilities provided by the

government. The groundwater irrigation is seen as an option but it is rather costly. Government is increasing load shedding and there is no electricity. In the time of fuel crisis, diesel is also not easily available. Hence most of the farmers propose to think over for a locally developed irrigation system. People give example of Tengra River and suggest the way in which irrigation can be channeled easily to the field. This raises concern pertaining to the presence that IWRMP has on the ground. This is thus obvious to reflect whether farmers, especially female farmers will have any access to subsidies and services provided by public offices.

4.6.3 Political Influence in Water Distribution

Besides institutional failure, non-functioning of the canals in Amaduwa especially has historical reasons. One respondent noted that during 2051/52 BS when the project started for around two years there was water in the canal. But later water did not flow consecutively. The reason he put forward was of prevailing feudal nature of the big land holding farmers. It was said that when there was water in the canal, big farmers, by using all means - strength (*pelera*) used to irrigate their field. Those who could raise their voice loudly could get benefit. Big farmers did not allow small farmers to irrigate their fields. Hence, later people started to dismantle the structure of canal and made it a field.

In this respect, it is important to discuss how in practice canal irrigation system implemented under IWRMP works on the ground. The observation made while interacting with Roshan Chaudhari, a young gatekeeper of Sitaganj canal, Ekamba, gives a glimpse of how canal system functions. While researcher was interacting with Roshan Chaudhari, he (Roshan) got a call from Ramcharitra, his immediate boss – a sub engineer at Sunsari Morang Irrigation Project. Roshan worked under Ramchritra's main canal in Sitaganj section. This was his new job where he had replaced his father which paid him around NPR 13000 per month. After retirement of Ramesh from gate keeper, the job was transferred to his youngest son Roshan.

In the conversation with his boss, Roshan was asked to close 92 no. gate through which it appeared that water left running towards Morang that they (people of the Morang) did not needed. Hence, Roshan was directed to shut the door so that water would not flow towards Morang. Indeed, as Rosan explained, he is not the person who looks after gate

no. 92. Hence Roshan called his colleague in Khanar who was responsible for gate no. 92, and asked to look if the gate no. 92 is open near Khanar. But he got an instant reply from his colleague that the gates were closed and it was only the leakage that was running and matter got settled there. This is the work style in which canal system functions throughout the year. If particular gate needs to be opened or to be shut down Roshan would receive a call from his senior and do accordingly. But at this instance, work was done based on conversation on phone, leave apart making an effort to look for the situation.

This is normal course of action in which IWRMP canal irrigation system functions. As Roshan claims, for him this is not a job but a time pass. System functions in such a way that he does not get his salary on time. At times, he would have to wait for months to get his salary. Since Roshan does not think this as his regular job. He is planning to go to 'bides' as migrant instead being in the village for whole of his life as a canal gate keeper.

On the other hand, elected representatives from Water User's Association also show dissatisfaction in the way in which Sunsari Morang Irrigation Project operates. Chandra Lal Chaudhari, chairperson of tertiary canal no. 11, in Amaduwa, Kharitole complained in similar tone. He said, '*kulo ra kuro ma rajniti garnu hundaina.*' – "One must not do politics in canal related matters as well as in the normal sharing and talking with one another". He shared his experience, "The chairpersons of water courses are discriminating. They have the responsibility of cleaning and maintaining canal. But they never come to our side (Amaduwa) for canal maintenance, nor do they let anyone to act. Sand flowing from the very head part of canal is collected at our end. The canal course is blocked. How can water flow? In opposite, when there is heavy rainfall, farmers of the upper area close all the canal outlets. All water flow to our land that brings flood. To tell the truth, since two years there has been no programmes organized for canal irrigation related work. I have been chairperson of tertiary canal no- 11 but have not taken part in any meetings of WUA. Whatever voice we raise or whatever proposal we give, if nobody addresses them, there is no use of participating in the programmes. There has been monopoly on the part of the president. They handle budget and take commissions. World

Bank is providing budget for irrigation scheme, but it is misused. Personally, I do not have good internal relations. There is too much of politics involved in it.”

Experiences shared by the informants are self-explanatory as why Amaduwa is not getting water, and even if Ekamba gets water, farmers still keep complaining. From various experiences explored earlier, it is clear that IWRMP is not functioning at the level on which it has to. The reasons can be various. However, the pertinent one is the malfunctioning of WUA and the negligence of office bearers and technical experts. Functioning of the canal system is growing lethargic to the extent where water does not flow until half way through the track but nobody takes responsibility of it including officials as well as WUA members and farmers. This seems possible only due to rampant irregularity that retains the system, which never come to forefront as shared by Chandra.

4.6.4 Dependence on Groundwater due to Non-functioning of Canal

In addition, in the case of Amaduwa, for many, irrigating field is seen as a work that required a lot of effort and a dependence on others, especially on water sellers. Although this area falls under IWRMP project and there is a redundant structure of Sitagunj Canal Irrigation System, yet people are highly dependent on ground water. Surprisingly, there is nothing being done by the GoN or IWRMP officials to support farmers in terms of groundwater irrigation.

This was visible during fieldwork. In Kharitole, farmers were observed searching for vacant pump set to irrigate the field. For instance, one early morning, a young man, Basant Kumar Raya, who helped his father in farming on part time basis during farming seasons, found cycling in the village to find a pump set which he could hire to irrigate land. When researcher inquired, Basant replied, *“I want to sow rabi phasal (lentil) in our farm. This year there was not enough rain falls. Field has gone dry. Somehow we managed to harvest paddy but to sow ‘rabi phasal’ and implant seeds there is no moister in the land. I need to irrigate it. I do not have a pumping set, hence I have to find one from others on rent but today not a single set is free.”* While Basant was interacting with researcher, he (Basant) could see one of his fellow villagers carrying a pumping set on his bicycle. Taking a break from our conversation Basant asked the man if he could irrigate his field. He said- Is your pump set free? - *‘Khali nai cha daju. Hamro khet pata de na.’*

Instantly he got reply - '*Kaahan chai khali, dekhai nai chhi apne pataba jaichiye*' - "No, this is not vacant; see I am going to irrigate my field."

It was obvious that while researcher was chatting with Basant next to a road side tea shop, they could see four different households transporting their pumping sets to the field either on a bicycle or in a *thela gadi* (hand pushed). While heavy pump set was being carried by a young man on a bicycle or on a *thela gadi*, pipe and other instruments were carried either by a female or a relatively middle aged man. The weight that these old men and women carried was not less than 30 kg. There are around 321 households in this locality of which only around 12 households own pumping set. This shows limited means of irrigation facility and the reason why farmers need to haunt for a pump set during farming season. This points out that in Amaduwa, insufficient water for irrigation is an issue which troubles both men and women.

4.7 Limited Gender Empowerment in Canals

In the context of institutional failure and elite capture on irrigation resources, farming is understood differently by different strata of farmers. Of course this affected all farmers including women. It is thus necessary to look specifically at women farmers, and identify the ways in which women's are engaged in the interventions – who largely lead agricultural production. On top, given the gender constraints it is obvious that the women have a limited participation in water user committees which is supposedly the institution to manage equitable distribution of water to the field.

Moreover, to assure women's access to irrigation, gender strategies in IWRMP are incorporated in the Indigenous/Vulnerable Community Development Plan (I/VCDP) under "Social & Environment Management Plan". The societal aspect of the project is addressed through Resettlement Action Plan (RAP), Indigenous People Development Plan (IPDP) and Gender Action Plan (GAP). Although policy assures 33 percent of women representation in WUA formation, but it is not in practice at least in the study sites of Sunsari where in all WUAs within the project only few have been able to meet the policy. On top, in majority of the WUAs, women's participation appear limited to symbolism.

In Ekamba water run through canal therefore user group members are active in the committee to some extent. Nevertheless, female members have little influence in the committee. Women's presence is seen as a requirement of the project rather than of an active participation and contribution. A step further, when it comes to Amaduwa, participation of user group members is limited to paper. Moreover, at times it serves only as a political tool which is heavily influenced by various political ideologies depending upon member's inclination. As a norm, there must and are at least one female member in the user committee, but their presence appear tokenistic.

To understand why women's participation in WUAs has been limited, it is important to explore women's restricted role in the public sphere more broadly. It was reported that other than micro-finance institutions, women were engaged in a few informal or formal institutions. This showed their restricted engagement in public matters compared to men. Moreover, it appeared that for women the concern was to focus on income generating activities whereby they could save money and acquire economic prosperity and not to participate in public life.

Only one female respondent from Amaduwa, Sita Devi Chaudhary, shared that she was involved in one NGO in the capacity of secretary. Ms. Chaudhary shared her experience in this way, *"I am SLC pass. For a woman to achieve that level of education were less likely during our time. Most of the other women can only read and have studied to class three or four. I used to coordinate the programmes conducted in the school. I took initiation in conducting informal education programme. I called and motivated women and girls to have informal education. I can talk Nepali very fluently while most of the women can speak only Tharu language. I also took part in various awareness and sanitation related programmes. I conducted trainings related to education and awareness to women in Biratnagar and Itahari. This has given me confidence and strength to manage my thing"*.

Similarly, Sushila Chaudhary's case explicitly elaborates why there is an indifference to participate in WUA on behalf of women. Among various reasons of none participation of women, Sushila's narrative presents an essential one. Sushila run a small shop in Ekamba with her husband. She stated, *"We together (husband) initiated this shop. We both*

contribute labour to run it. I can earn Rs. 1,000 to 1,500 a day. I feel good that now I have access to money. But in my view, though I have money, my condition is same like before when I had no access to economic resources. I don't think that I am empowered, because I am not educated. If I had education, I would have broad knowledge on many things of the world too and that would have helped me to improve my status as a woman."

This indicates that although women are increasingly becoming economically empowered. But without education and lack of appropriate information, they show low self esteem. This results in low capabilities that hinder women's participation in the public sphere and institutions like WUAs and farmers groups. However, lived experiences of all women are not the same. If a woman remains busy all the time in both productive and reproductive activities, and thinking about fulfilling her family's needs, then she will have no time to think about getting involved in institutions like WUAs. Participation in public matters even may not be in the women's priority list.

In addition, there also remain significant socio-cultural and ideological barriers which restrict women's role in public sphere. At times, the way in which family members and others in the community view women play out remarkably. Lalita of Ekamba explored these barriers suggesting that people in the village, especially male and at times also husbands think differently towards their wife. They become suspicious, if ladies go out or if they talk to other male, or if they go to the market with others. This too contributes psychologically and pressurizes women adversely to think and engage in public matters freely.

CHAPTER FIVE

SUMMARY AND COCLUSION

5.1 Summary

In the absence of male agricultural worker, farming in the rural villages is becoming a realm of women. Furthermore, at a time of agrarian stress and out-migration a new set of challenges face women farmers. Women are seen to be exceeding the number of agricultural laborers compared to men. This has led to the feminization of agriculture that is not only limited to woman contributing more labour, or a large number of women are being engaged in agriculture, but it is transforming the agency of women. Increasingly, a woman being the household head has left them with no option other than to earn and contribute to family resources given the persisting demand of a global consumeristic economy. Thus women are seen being caught between the contradictions of alternatives and livelihood pressure to which they require to respond. A quest for contributing to livelihood means has led women to explore new income generating opportunities.

As a result, economic empowerment of women has risen considerably. Women find new enterprise based opportunities, and manage finances while their husbands are abroad. Particularly, for women, access to saving and credit through microfinance is seen encouraging which facilitate them to get engaged in small enterprise. These opportunities are transforming livelihood options as well as gender relations at a time of agrarian stress and out-migration.

5.2 Conclusion

To conclude, in the light of agrarian stress, Madhesh – Tarai of Nepal in general, and Sunsari in particular, is having a continuous fall in agricultural production. There are various factors that have further added to agrarian stress in the district. Unpredictable climate with frequent dry spells has created a drought like situation, adversely contributing to sustainable agricultural development in the region. Striking climatic demands have brought changes in agricultural practices. Increasing dependence on

fertilizers and use of modern technology in farming, including lifting ground water for irrigation have substantially amplified the production costs in farming. This is resulted in a decreased interest of young male farmers to do farming. As a result, a majority of farmers are compelled to keep a larger volume of land fallow, further adding to low agricultural production in the area. This rising insufficiency in agricultural production due to agrarian stress has raised concern for food security. It has compelled locals to adopt other means of sustainable livelihood. Among many, one of the best alternatives that labour intensive youth find is temporary migration.

This is important, as not all female headed households are able to benefit from off farm enterprise to the same degree. Moreover, for agriculture, access to water for irrigation remains a critical constraint which has imposed a threat to livelihood security, particularly to maintain yields at a time of ecological decline and unpredictable rainfall. There is a significant difference exist in agricultural outcomes between villages with access to canal water and those dependent upon groundwater.

Moreover, the role of women within institutions in managing water resources for irrigation is still at margin and is viewed merely tokenistic. This is mainly due to the weak and non-functioning institutions for both canal and groundwater management in the districts. Access to water for irrigation is further aggravated by gendered barriers, which limit women's participation, despite the critical role that they play in agricultural production. For women farmer, irrigating field is a complex matter given the difficulty that they face to buy water from water market.

In addition, gender role division is different for male and female where irrigating field is solely the work of men. Since women's roles are defined and constructed within socio-cultural expectations and experiences, female accept societal norms, even though they being uncomfortable with the practices. Thus phenomenon of gender identity is ultimately contextualised within a unit of family since the centrality of gender relations are dependent on the way in which the word 'gender' is defined and discussed within a socio-culturally constructed framework.

On the other hand, women's empowerment is infused by the desire to have money, educate their children in the private boarding schools, and earn land as a resource for long term livelihoods. Empowerment of women thus relates to various notions that vary from ownership of resources and contribution in income generation to self-confidence. However, in many ways these various factors are complementary to each other in which we may be able to understand what empowerment is.

In contrary however, at a time when women are playing a greater role in decision making, they still face significant constraints in accessing public resources such as subsidies. That is also due to the lack of participation of women in WUAs and the dynamics that is at play to compete within a range of issues including household management, farm workload, micro credit engagement and livelihood issues.

However, the most apparent is the existing challenges pertaining to groundwater interventions that are not rooted only in gendered constraints, but in broader political economic processes and institutional weaknesses in the implementation and design of programmes. Besides that, poor spread of groundwater interventions, and elite capture on subsidized resources imposes further constraints that are particularly high for women. Nevertheless, it is important to note, that gender is not always a barrier in itself, but the condition of women who are already in a vulnerable situation, can be aggravated by external factors, and these are preventing women from realizing their full potential in agriculture, despite changes in ideologies for the better.

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Annex A

Case Studies of Successful and Unsuccessful Migrant Family where Women are the Household Heads

Guidelines for Case Study

-) Explore family history
 - e.g. How due to migration, family life is changing over the period of time, that includes –
 - How and whether they are better off than they were five years ago
 - Land cultivation in the past and at present and changes that family members are facing in terms of production, labour force, and other management regarding harvesting
 - Able to get connected with other services such as education of children, health facilities, able to purchase for livelihood means in the local market
 - Construct a narrative that gives a picture
-) Explore changes in everyday roles in the family and community and women's empower
 - How migration has contributed in role change in the family
 - How do they set priorities among various roles and how decisions are taken
 - How confident women are to make use of changing roles if at all visible
 - How do they negotiate or collaborate with others outside her family
 - What are the challenges that they face and how do they handle them
 - Challenges could be for example having label of bad women, isolation (feeling at times isolated), middle man taking advantage etc.
 - Explore an story if available
-) Participation of women in the institutions regarding farming
 - How women members are replacing men in participating various user groups in absence of a male head in the family
 - How they are able to get benefits from these user groups

- How they handle caste and class issue in the group
 - Who influences the group and how do women handle the situation to get their share
 - Explore relevant story of manipulation in the group or group dynamics etc.
 - Whether politics are played in the group and how do women handle it for example, irrigation of land etc.
 - How do they create social network whether these networks are helpful
-) Women's perception and capabilities on gender role negotiations
- How being a women they think of themselves while performing several roles at a time
 - Do they face any difficulty, if so, how do they think women would be better off in performing various roles
 - In women's views how they think they are contributing to over all family bounding or it is their compulsion
 - Explore personal stories if possible

Annex B

Guiding Questions/Checklist for Key Informants' Interview

-) Personal and family profile
-) Livelihood of villagers: sources (agriculture and remittance)
-) State of irrigation and water management in the community and infrastructure development that has taken place in the past
-) People's concerns regarding farming and its dependency on irrigation facilities
-) Major responsibility and achievements in terms of water and irrigation issues in the community
-) People's complain to local authorities regarding agricultural matters
-) Major problems and needs of village for agricultural activity
-) What is needed to be done to strengthen agricultural outcomes
-) Major economic activities related to farming activities
-) Accountability of agricultural public post holders
-) Social/cultural and reformation and change
-) People's engagement in user committees and other government programs
-) Women's participation/decision in irrigation process
-) Women's representation and participation in formal and informal process of irrigation related matters
-) State of women empowerment – what empowerment mean for them and how it is reflected in their view
-) Inter-group relations in the village (discrimination and deprivation)
-) Participation in village governance (both formal and informal)
-) Gender division in household and other agricultural activity
-) Involvement in use of public resources (who make decision and how)
-) Political influence and intervention

Annex C

Interview Schedule for Household

Introduction of Researcher and Consent Taking

Namaste! My name is **Machindra Narayan Jimi**, I am here from **Central Department of Sociology**, Tribhuvan University, Kirtipur, Kathmandu. I am conducting a research on **“Migration, Role of Women and Access to Irrigation in Sunsari: A Case of Ekamba and Amaduwa”** for my Master’s Degree in Sociology. I am trying to better understand the lives of rural people in Ekamba and Amaduwa. The information will be used to inform future programmes on agriculture/irrigation/migration in certain communities of Nepal. Your household has been chosen by a random selection process. You are one of over 12 households that I will meet to discuss in depth with you about issues and opportunities for men and women. I will also be interviewing a few key people as key informants for the purpose of this study.

During this study, I will ask you questions related to gender inequality and women’s empowerment in agriculture. I am inviting you to be a participant in this study. I would value your opinion and there are no wrong answers to the questions we will be asking in the interview. I will use approximately 1 hour of your time to collect all the information. There will be no risk as a result of your participating in the study. Your participation in this research is completely voluntary. You are free to stop answering our questions at any time.

The information given by you will be strictly treated as confidential and will be used only for the study. Your participation will be highly appreciated.

Are you willing to participate in the study? 1. Yes 2. No

Signature of the interviewer: _____ Date: ____/____/2073

Location:

Name of village		Ward No.	
VDC name		District	

Demographic Profile:

Note on Instructions: Read the definition of the household aloud and make sure the respondent understands that only household members as defined for this survey are included. Complete the list of names first, and then complete section for each person before asking for the next person. Probe at the end by repeating this survey’s definition of household to make sure all have been included and no one extra.

For combined income, please ensure it is not double counted. For example if more than one person works on the farm and it is not possible to get income for each individual by that activity, please enter the income from farming under the person who works primarily on the farm and do not include this amount again for any other person who worked on the farm to help make this income. The primary occupation is the activity on which the household member spends most of his/her time. The secondary source is an additional activity/occupation. For example, if a person spends most of the time on salary wage employment that would be primary. But if s/he also looks after the farm or manages the farm or looks after some business, in addition to his/her salaried employment, that would be his/her secondary activity. It could be possible that someone earns more from his/her secondary occupation than his/her primary occupation.

1. Start with the Household Head

<u>Name</u>	<u>Relations</u>	<u>Age</u>	<u>Sex</u>	<u>Marital</u>	<u>School</u>	
	What is the relationship of ___ to the household			<u>Status</u> What is ___’s present marital status?	(Only for members >=3 years)	(Only for members >= 6 years and above)

	head?				Is _____ currently attending school?	What is the highest grade/level _____ has completed?	What is _____'s main type of occupation?	Could you rank the importance of this occupation for the household income? (high/medium/low)	What is the secondary type of occupation?

Note on Definitions:

Household: A group of people who live together under the same roof and take food from the “same pot.”

Household Member: someone who has a) lived in the household for at least 6 months, b) shares food from the same pot as others under the roof, and c) resided there regularly at least half of the time during the 6 months (3-4 days of each week for 6 months, 3 full months of the 6 months, etc.). Even persons who are not blood relatives (such as servants, lodgers, or agricultural laborers) are included if they meet these three requirements.

Exceptions include (Consider as household member):

-) A newborn child less than 6 months old
-) Someone who has joined the household through marriage less than 6 months ago
-) Servants, lodgers, and agricultural laborers currently in the household and will be staying in the household for a longer period but arrived less than 6 months ago

Non-household Member: Someone who stays in the same household but does not bear any costs for food or does not take food from the same pot. For example, if two brothers stay in the same house with their families but they do not share food costs and they cook separately, then they are considered two separate households. Generally, if one person stays more than 3 months out of the last 6 months outside the household, they are not considered household members even if other household members consider them as household members.

Exceptions include (Do not consider as household member):

-) A person who died very recently
 -) Someone who has left the household through marriage
 -) Servants, lodgers, and agricultural laborers who have left the household
2. Religion:
- A). Hindu b). Muslim c.) Buddhist c). Christian e). Others –specify

Agricultural Realities

3. What is your land ownership status?

Owned land area (bigha)		Rented land area (bigha)			Who is landlord (tick)		
Owned and cultivated	Owned and rented out	Share-cropped	Fixed rent	Other tenure	Absentee (where does he/she reside)	Local farmer	Family member

4. 6. Do you own any of the following agro based instruments for farming?

SN	Instrument	Yes	No
a.	Pump set/generator/boring		
b.	Tractor (4 wheel/2 wheel)		
c.	Thresher (family owned)		
d.	Plough (halo)		
e.	Tyre (Gada/kath/tyre)		
f.	Others		

5. Do you employ labour from outside the household? 1. Yes 2. No

If yes, how many labour days did you employ for each of the following seasons? (Also note - Male/ Female and wage discrimination)

Monsoon _____ Winter _____ Summer _____

General Agriculture Questions

6. What Kind of problems do you face in continuing agricultural activities in the village? (Labour/seed/irrigation/fertilizer/market/price/loan/ other hazards)

7. For how long have you faced these problems?

8. Do other households face similar problems?

9. What have you done to address them?

What Facilitates Empowerment?

Migration:

10. Information on migration

<u>Labour migration</u> Yes/ No	<u>Type of migration</u> Seasonal / Permanent	<u>Age</u>	<u>Sex</u>	<u>Marital Status</u> (Married / Unmarried/ Other)	<u>Remittance sent in the name of</u> ../if not specify	<u>Remittance money invested in.....specify areas</u>	<u>Who decides on spendings?</u>
						1. 2. 3. 4.	

11. How has migration altered your family's economic status?

12. What are the other impacts of migration?

13. Who managed the following agricultural activities before/after migration? Can include husband, in-law or labourer-

For each activity where a change has taken place, note any difficulties which have been faced.

Activity	Before Migration	After Migration	Difficulties
Ploughing			
Sowing			
Arranging rental of pump set/tubewell			
Overseeing irrigation from pump			

set/tubewell			
Overseeing irrigation from canal			
Managing labourers			
Marketing			

14. Who takes decision regarding water and irrigation related matters? How do you share (female/male members) the stress of workload pertaining to the demands of water and irrigation in agriculture in the family?

15. How was it before your family member (husband or others) migrated?

16. How have other decision making responsibilities in the household changed following the migration of your family member?

17. How do you manage to influence the decisions of others in your family regarding agricultural needs and livelihood issues (overtly or covertly)

Financial Resources

18. How are financial decisions made? How has this changed since migration?

19. Have you taken a loan? Amount and purpose, to whom, did you face any difficulty?

20. Is managing finance easier or more difficult since the migration of your family member?
21. Did you have to ask someone in your household to get loan (for female only)?
22. If you have an urgent demand for cash, where do you go?
23. Do you think that women are financially and personally secure in our family and society?

Access to State Resources Pertaining to Agricultural Activities

24. What are the supports you getting from government for agriculture related matters? If not then go to q.29.
25. How did you find these supports?
26. Did you utilize any outside support to get governmental services (eg. Network, political influence, knowledge power etc.)?
27. In your opinion, who gets benefits of government supports (caste /class/educated/ political affiliation)?
28. How do they get these government supports?
29. In your opinion, how social network works to have access to public services?

Participation

30. Are you or your family engaged in any of these organization or institutions that functions in your village?

	Institutions	Male Members (tick)	Female Members (tick)	Name of Organization	Role in Organization
A	Club				
B	CBO				
C	NGO				
D	WUA/ Farmers Organization				
E	Religious institutions				
F	Ethnic/ Caste Based Institutions				
G	Women's Organization				
H	Financial Organization				
I	Political Organization				

31. Why did you/they decide to become a member?

(If another family member is involved): Would you like personally to be part of this organization? If yes/no, why?

If nobody from your family is a member of this organization, why?

32. What benefits have membership of this organization brought?

33. Do you go outside the household? How often? Where and for what purpose?

Land Ownership

34. Do any women in the household have ownership of land?

35. Are more women owning land in the village when compared to before? Why?

36. How did you acquire the land (e.g. inheritance or purchase) and why?

37. What do you perceive are the primary advantages for women of owning land?

Perception of Empowerment

38. Could you tell us about your life in terms of how do you feel as a woman and view yourself (position & role) in your family?

39. How women are viewed in your community?

40. What do you think of differences in terms of being a women or man?

41. Do you think that women have an unequal position in the society? If so, in your opinion, what do you mean of women's equality?

42. In your opinion, how women's equality issues can be raised in the family and society?

43. How do you view yourself in contrast to men?

44. Whether this comparison between men and women by you disturb you or support you?

45. What are the cultural norms and values that are important to you? And why?