

Feminization of Agriculture in Melamchi, Nepal?

Addressing gender in agricultural production and household decisions



Master Thesis in Development Geography

Department of Geography

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“Only mother knows the pain of washing clothes. Only father knows the pain of ploughing the fields” (Nepali proverb).

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When I first heard that Nepal had been hit by a shattering earthquake on April 25th 2015, I could not believe that it was true. The pictures that I saw on the news were nothing like the images and memories that I brought back home after spending two months in this amazing country exactly one year ago. I feel great sadness thinking about all those who have lost their family members, their homes and livelihood. I can only hope that the people I met during my fieldwork are in good health, and that they will find the strength to rebuild their homes and lives. I want to dedicate this thesis to all the wonderful people I met during my fieldwork in Melamchi who generously shared their time and information, and helped me in numerous ways. I am eternally grateful!

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Gunnhild Laxaa

ABSTRACT

This thesis is based on two months of fieldwork in Melamchi, Nepal in 2014. The objective of this study is to examine whether a “feminization of agriculture” has occurred in the study area by investigating the local farming system and the gendered division of agricultural labour and managerial responsibilities.

According to the household survey (n=54), a strong gendered division of agricultural tasks exist in this area, thus men and women have clear responsibilities and restrictions. By the use of various fieldwork methods it was discovered that women in some cases have to take on tasks that are generally considered “men’s work”. Women are in charge of various managerial decisions related to the agricultural production, but any major decisions are still controlled by men. Decisions concerning how to spend the household income are made by men alone in 67 % of the households. The real influence of women as decision-makers can therefore be questioned. The influence of factors like education, caste and ethnicity and access to financial services has also been discussed. I argue that a feminization of labour does not ensure a strengthening of women’s position in the household, rather, if women get more work and no influence in decision-making processes the “feminization of agriculture” is just a form of exploitation.

An attempt has been made to explain how the authority of the decision-maker obtains legitimacy in patriarchal households in Melamchi. In order to do this, Weber’s theory of domination and the description of the ideal type traditional authority have been used. According to informants, parampara (tradition) is the main reason why men legitimately dominate decision-making processes. Therefore traditional authority is relevant in this case. I argue that social structural like virilocality and patrilineality should be included in the definition of traditional authority.

Ecofeminists argue that if women could choose freely, they would grow subsistence cultivation with high biodiversity in order to feed their families and take care of nature. Even though women were often found to be in charge of the cultivation of vegetables and subsistence farming, this cannot be seen as a sign on their affection towards nature. Women expressed a wish for more intensively driven production in order to increase the household’s income, just like their male counterparts. I therefore argue that women are not more concerned with the small-scale, subsistence farming, rather that they have been confined to it.

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GLOSSARY

<i>Aamah</i>	Mother
<i>Aamah Samoah</i>	Mother's group
<i>Bari</i>	Un-irrigated land
<i>Bazaar</i>	Central area
<i>Chori</i>	Daughter
<i>Hath</i>	Hand
<i>Khola</i>	Stream or river
<i>Khet</i>	Irrigated land
<i>Pakho</i>	Pastures and outlying areas of land
<i>Parampara</i>	Tradition
<i>Pariwar</i>	Household
<i>Parma</i>	Exchange labour
<i>Raksi</i>	Local liquor
<i>Ropani</i>	A unit of measurement of area of land. 20 ropani \approx 1 hectare
<i>Rupees</i>	Nepalese currency
<i>Sari</i>	South-Asian garment for women. It consists of a long piece of cloth which is draped around the body in a special way.
<i>Shalwar Kurta</i>	Nepalese clothing style. Literally means blouse (<i>shalwar</i>) pants (<i>kurta</i>).

ACRONYMS AND ABBREVIATIONS

CBS	Central Bureau of Statistics
CIA	Central Intelligence Agency
GDP	Gross Domestic Product
FAO	Food and Agriculture Organization
FUG	Forest User Group
GII	Gender Inequality Index
HECDO	Helambu Community Development Organization
IFPRI	International Food Policy Research Institute
MWSP	Melamchi Water Supply Project
NGO	Non-governmental Organization
NRP	Nepali Rupees
OGUS	Organized Group for the Upliftment of Society
SPSS	Statistical Package for the Social Sciences
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development
VDC	Village Development Committee
WED	Women, Environment and Development
WHO	World Health Organization

CHAPTER 1: INTRODUCTION

Agriculture is the primary source of livelihood for the majority of the population in Nepal. Researchers have documented increasing participation by women in agriculture in many parts of the world, including Latin-America (Deere, 2005), Africa (Mtshali, 2002, Lastarria-Cornhiel, 2006), India (Ganguly, 2003) and China (Zhang, 2002). This thesis discusses the significance of this “feminization of agriculture” in my study area, which is Melamchi village and its surroundings located in Sindhupalchowk district in the central region of Nepal.

The aim of this study is to investigate various indicators and potential effects of a feminization of agriculture in the study area. In order to enhance the understanding of the current situation and the common practises of farmers in Melamchi, a comprehensive description of the local farming system will be presented. Focus has been put on the complex gender roles and relations in farming households and in agricultural production. This has been done by shedding light on the gendered division of agricultural activities and managerial decisions. Women’s role in both agriculture and household activities has received extra attention as it has been argued that their responsibilities are increasing in rural areas of Nepal. Another aim of this study is to analyse the influence of gender in decision-making in farming households, and how the authority of the decision-maker is legitimized.

If a feminization of agriculture has occurred in Melamchi, what change will it make? Possible effects of an increasing female influence on agricultural production will be discussed, both in relation to changes in the local farming system and potential consequences for food security. Hopefully, this case will inform a discussion of whether the concept of agricultural feminization is relevant for describing the current situation in Melamchi, or if other factors are more influential. Enhanced understanding of the complex dynamics and importance of gender in the local farming systems might lead to implementation of more suitable policies and practices for improving the livelihoods of farmers in the study area.

1.1 Background

More than 60 % of the economically active population in Nepal is engaged in agriculture, and approximately one third of the country’s GDP derives from this sector (World Bank, 2014a). The future development of the agricultural sector in Nepal will thus be of great importance for

the national development as a whole, and changes in this sector will have implications for the entire Nepalese population. The agricultural production in Nepal has traditionally been characterized by small-scale farming that is largely dependent on the monsoon rain, and the usage of traditional methods. In recent years, the agricultural sector in Nepal has shown signs of being in a process of change. In some parts of the country a transition from subsistence farming to a more intensive, market-oriented production has been noticed. The reasons for this transition include an increasing degree of market integration, institutional development, migration and labour shortage, and the increasing value of cash crops (Adhikari, 2013).

Nepal is a patriarchal society where men have traditionally had the responsibility of providing for their family. They have usually achieved this by securing the production of agricultural goods to feed their family, but in the last 10-20 years it has become a common expectation that the male household members take on waged work in order to support their families financially (Hoermann and Kollmair, 2009). Because of the limited number of paid jobs in rural areas of Nepal people are forced to move to urban centres, or abroad, in the hope of finding a job. Since men face less mobility- and time constraints than women they are more likely to abandon agricultural work at home and seek waged jobs in other sectors (Bhadra and Shah, 2007, De Shutter, 2013). A national survey from 2001 showed that the proportion of male migrants (89 %) were significantly higher than the proportion of female migrants (11%) in Nepal (Bhadra and Shah, 2007). In contrast with the findings from this survey, it has been implied that in Sindhupalchowk district the number of female migrants is actually higher than the number of male migrants. The main reason for this is the problem of girl-trafficking which will be discussed in Chapter 4. Even if the male migration rate in this district is lower than the national average, it is a general trend that men migrate further distances and for longer periods of time (Hoermann and Kollmair, 2009). The male migration thus has significant effects on the remaining household members who are left behind.

Cernea (1978) argues that large parts of the agricultural population in poor countries tend to take on the characteristics of a residual population. “Those who cannot leave remain in agriculture, which makes the agricultural population prone to dramatic imbalances in sex-ratios and age-ratios” (Cernea, 1978: 112). If this is true, the male dominance in both migration and shifts to off-farm work gives us reason to expect that the agricultural population in Nepal in large parts consists of women. Supporting this argument is the marked increase in the number of economically active women engaged in agriculture in Nepal. In 2001, 73 % of the economically active women of Nepal were engaged in agriculture, while in

comparison only 60 % of the economically active men were engaged in this sector (CBS, 2004a). These numbers indicate that as the males move away, either physically, or by shifting their interest to other types of work, agriculture is increasingly becoming a female occupation (Jiggins, 1986, Jiggins, 1998, Upadhyay, 2005). This trend is not restricted to Nepal but has been identified in several countries in Asia, Africa and Latin-America, and it is one of the major reasons for the rising concern about the process of *agricultural feminization* (Jiggins, 1998, Mtshali, 2002, Deere, 2005, Lastarria-Cornhiel, 2006).

Even though the feminization of agriculture is broadly accepted by different scholars, there is no consensus about how to define and identify it (Jiggins, 1998). In this thesis the definition and following discussion about agricultural feminization is based on the article by Brauw et.al (2008) who conducted a research project about feminization of agriculture in China. The authors distinguish between two different types of agricultural feminization, namely a feminization of labour and a feminization of management. “The feminization of agricultural labour [...] occurs when women perform an increasing share of on-farm work within the household” (ibid: 332). The feminization of farm management occurs in two possible ways; either when women increasingly become the primary decision-makers on the farm, or when they gain greater access to agricultural income (de Brauw et al., 2008). Implicit in the notion of a feminization of agriculture is an expected strengthening of women’s position in rural areas, but empowerment of women is not necessarily the result of this development. If women only take on a larger share of the agricultural work, but not the managerial responsibility of the farm their position in the household could actually be weakened and the validity of the term “agricultural feminization” should be evaluated.

There exists a common perception that men and women have different fields of interest in agricultural production. Men have traditionally been seen as innovative and focused on producing cash crops for monetary income, while women have been depicted as less likely to take risks and make use of new innovations. Instead of focusing on cash crops, women are more concerned with diversification and subsistence production that ensures food for their family (Sachs, 1996:29-43). Men and women often have distinct roles in agricultural production with differentiated types of work as their responsibility (FAO, 1999). Through these differentiated activities men and women have developed distinct areas of expertise and knowledge about local environmental conditions, plant- and animal species and their usages (ibid). With this basis it seems natural that they will have different focus in agricultural production. If the statements presented above are accurate one can imagine that a feminization

of agriculture might lead to a more subsistence based agricultural production. On the other hand, women might take over the production of cash crops even though this has been seen as a male domain. Either way, a feminization of agriculture has the ability to severely influence the agricultural production in Nepal.

Before 1990 Nepal was ranked as a net food exporting country, but now the country is characterized as a net importer of food grains from neighbouring countries as the agricultural production rate is slower than the population growth rate. This has caused demand to surpass supply and labels Nepal a food deficit country. “Per capita food availability in 1961 was 336 kg, which has dropped to 280kg in 1999, and is likely to drop further if productivity is not increased” (Jha, 2003). As the production rate is not managing to keep up with the increase in population growth, Nepal’s food security is deteriorating. The World Health Organization (WHO) defines food security as existing “when people have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and enable an active and healthy life” (WHO, 2015). Food security primarily depends on local agricultural productivity and food purchasing power (Tiwari and Joshi, 2012). The definition of food security is complicated by the fact that food security is scale dependent. At the household level, food security refers to the household’s ability to secure adequate food for meeting the dietary needs of all members of the household, either from its own production or through purchases (FAO, 2010). Even households that do not produce any food can therefore be food secure. At the national level, food security is essentially dependent on the national agricultural production. Food is a fundamental human right, and it is the responsibility of all nations to ensure food security for their population. This is a great challenge for the Nepalese policy makers, and an important reason why any potential changes in agricultural production should be of special interest to them. Exactly *how* agricultural production should be conducted, and what methods farmers should emphasize in order to ensure food security is not fixed and indisputable. Some scholars argue that focus should be put on intensification of agriculture and the usage of new types of crops, technologies and transgenics (i.e. Lipton, 2001, 2007). Others think that food security can be ensured by focusing on enhancing agrobiodiversity at the household level (i.e. Main, 1999, Thrupp, 2000, Sunderland, 2011). Even though researchers have opposing opinions about how to achieve the goal of sufficient and sustainable agricultural production and usage of natural resources, it is a common mistake among most of them that they fail to include gender in their analysis. In this way they end up passing gender-blind policies even though agriculture is very much a gendered practice (Upadhyay, 2005). Even though it is

difficult to quantify exactly how much food women produce globally it is clear that they are important agents of food security and household welfare, especially in developing countries. In addition to being important food producers, women play a key role in all smallholder farming systems and they have the primary responsibility for food preparation (Doss, 2014). The productivity and economic empowerment of women should therefore be a priority in agriculture programs and policies that seek to promote agricultural development and food security (Ashby et al., 2008).

A research project from Burkina Faso conducted by Udry et.al (1995) found great disparities in the amount of yields cultivated on comparable plots of land, varying in relation to whether it was a woman or a man in charge of the production. On average, yields cultivated on plots controlled by women were 18% lower than on plots controlled by men. This result was found even though the two plots were planted with the same crop, at the same time and within the same household (ibid). Based on the results from this study it could be argued that women are less efficient cultivators than men, but the authors presented other reasons for this disparity. They had discovered that non-household labour was used more intensely on plots controlled by men, and that most of the manure was concentrated on these plots. Thus, the large gender differences in the amount of yields produced did not necessarily imply that women are less efficient cultivators than men, rather these yield disparities reflected the differences in the intensity with which inputs were applied on men's and women's plots (Udry et al., 1995: 63). A research project conducted by Aase (2011) in Manang, Nepal, investigated which factors that had the greatest influence on productivity in agriculture. In sharp contrast to the findings from Burkina Faso, he found that female labour was the factor with the highest influence on productivity. Fields operated by women were more productive than fields operated by men. "Possibly, men who are more concerned with off-farm income are not as serious as women with strong commitment to maximization of local food production. If this is true, migration of men should have a positive effect on crop productivity" (Aase, 2011: 190). Even though the two case studies reached different conclusions, being aware of the complex household dynamics and gender relations is a crucial point for ensuring effective policy interventions that improve agricultural production and the livelihoods of farmers.

1.2 Research questions

Agriculture is the main occupation in the study area, but none of the farms in Melamchi are operated in exactly the same way. Even the simplest farm includes a complex set of activities, resources and interrelationships. One way to improve the understanding of this complexity is to “dissect agriculture into component parts and types of relations in order to study each separately” (Turner and Brush, 1987: 12). In compliance with the farming system approach, my first research question aims to:

1. *Describe the farming system of Melamchi with a special focus on the human subsystem.*

Men have traditionally been in charge of agricultural production and decisions related to it (i.e. what crops to grow, which technologies to use, the usage of pesticides and chemical fertilizer). Various researchers argue that agriculture is gradually becoming a female occupation as men have shifted their attention from agriculture to other types of work. I will investigate whether this applies for my study area, thus the main objective of this study is to:

2. *Examine whether agriculture in Melamchi is being “feminized”. And if so, can this process be described as a feminization of labour, or a feminization of management?*

In order to do this, the gendered division in agricultural work and managerial decisions in households will be identified. Factors that might influence this division will also be considered, including caste and ethnicity, education and access to financial services. Analysing how managerial responsibilities are divided between household members might reveal existing power relations in decision-making processes. If one person is in charge of major decisions on behalf of the household, he or she inhabits *authority* over the other household members. I wonder why the domination of the decision-maker is accepted by the other household members, or in other words; on what basis is the authority legitimized? This inquiry has been formulated into a third research question:

3. *In which ways does authority obtain legitimacy in Melamchi households?*

It is possible to imagine that women gradually take over managerial responsibility of the farm if their participation in agricultural production increases, but will this change the way agriculture is performed? Women and men are often seen as having different objectives and motivations for farming. The stereotype often depicts men as being more interested in making

money by cultivating cash-crops, while women are more concerned with providing food for their family by focusing on subsistence farming. These assertions have been incorporated into a final research question:

4. *Will a feminization of agriculture lead to changes in agricultural production?*

More specifically I ask *if female dominated farming will lead to a shift in focus from cash crops production to subsistence farming.*

Addressing these issues and identifying possible changes in agricultural production may help depict what the future situation for farmers in the study area will look like.

1.3 Limitations and delimitation

Some relevant topics and discussions have been left out of this study for different reasons. Firstly, the research has been limited to a small geographical area in order to make the most of a restricted amount of time for completing the project. Then again, concentrating on a relatively small study area improves the researcher's knowledge of the local conditions and thus enhances the validity of findings. The main focus has been put on agriculture as it is the main occupation in this area, and therefore any changes in this sector will have great implication for the local population. Severe changes are expected to be seen in the agricultural sector in the years to come caused by market fluctuations, political instability and climate change. These are all important topics concerning the future challenges of agriculture in Nepal, but time constraints and the complexity of these issues prevented me from including them more thoroughly in this thesis's discussion.

1.4 Thesis structure

Chapter 2 presents the methods applied for producing primary data during the fieldwork. Some of the challenges and ethical concerns that have occurred during this study are also discussed. Lastly, methods of analysis are presented to in order to clarify how the data has been processed and interpreted before it was included in the analysis.

Chapter 3 is devoted to the theoretical framework which the later analysis is based upon. The farming system approach is introduced, and various topics including notions of gender, feminism and authority are discussed.

Chapter 4 gives a general introduction to the study area. This is done in order to give the reader some knowledge of the context of this study in terms of historical background, physical environment and various socio-cultural features. A map illustrating the study area is also included.

Chapter 5 addresses my first research question as the current farming system in Melamchi is described in this chapter. This description will serve as a foundation for the subsequent discussion, and may enhance the understanding of the complexity and interrelatedness of the system.

Chapter 6 provides an elaboration of the possible feminization of agriculture in Melamchi in order to address the second research question. The first part of this chapter is concerned with the feminization of labour before it moves on to examine the feminization of management. In the final section of this chapter I discuss the legitimation of authority in decision-making processes in order to explore the third research question.

The final chapter summarized the thesis and presents some concluding remarks with reference to the research questions. Lastly, a discussion about how a possible feminization of agriculture in Melamchi might change the current farming system is presented.

CHAPTER 2: METHODOLOGY

Fieldwork is seen as “the heart of geography” (Stevens, 2001) and has always had a special importance for the production of empirical data in the discipline. The primary data of this thesis is the result of a fieldwork conducted from the beginning of April to the end of May 2014. The aim of my fieldwork was to get access to local knowledge and activities, and produce data with relevance for my research questions.

My research can be described as *qualitative oriented* considering the methods I have used to produce data, but I have also conducted some quantitative analyses in SPSS based on a household survey. Using mixed methods (i.e. both qualitative and quantitative) produces various forms of data and has the potential to illuminate the research questions in different ways. The idea is that using more than one technique for gathering, analysing and representing various human phenomena will lead to enhanced understanding of the phenomena investigated (Greene, 2006, Johnson et al., 2007). This chapter mainly concerns the various fieldwork methods that have been used to produce relevant primary data. In addition to this, some of the methodological and ethical challenges that I faced during the fieldwork and in the process of writing will be discussed.

2.1 Fieldwork methods

A combination of methods were used during my fieldwork in order to obtain a deeper understanding of topics like the local farming system, gender roles and the division of labour and managerial decisions between men and women in the study area. “Fieldwork takes us beyond current frontiers of knowledge and preconceptions, enabling first-hand discoveries that no amount of theorizing or study of pre-existing accounts or maps could ever reveal” (Stevens, 2001: 66). By positioning myself in the study area I was provided with an opportunity to engage in people’s lives, share experiences and learn about my informants’ concerns and interests. Using various fieldwork methods I have learned the answers to questions that I would otherwise never had thought about asking.

2.1.1 Observation

One of the most important reasons for conducting a fieldwork is that the researcher gets an opportunity to observe the social phenomena, activities and practices that she is writing about in their natural context, and has the opportunity to ask informants to explain them (Fangen, 2004). Kearns (2010) argues that observation has been wrongly accused of being a passive and static method. According to him observation is the outcome of active choice rather than mere exposure. Researchers have to choose both *what* to see and *how* to see it, and thus have an active role in the observation process. This calls for a constant reflection concerning the role of the researcher and the aim of the observation (Kearns, 2010). Even though observation can be directed by certain goals, it is difficult to restrict the observation to simply noting the predefined phenomena alone. This is why observation constantly provides the researcher with new topics and issues regarding concrete events that have been observed.

April and May are busy months for farmers in Nepal. Conducting my fieldwork in these months enabled me to observe many of the agricultural activities described in the thesis in real life. Sometimes my informants told me about a tool, a crop or a specific practice which I would later observe in real life and only then really understand what they had been talking about. Thus, observation has the potential to minimize the risk of misunderstanding when it is used in combination with other methods, and it also increased my knowledge of local conditions, traditions and activities. On a few occasions answers given during interviews proved to be modifications of reality. It proved easier to observe sensitive and complex issues (i.e. the social organization of households and discrimination of widows) in real life than to get a comprehensive oral explanation of these issues from someone.

2.1.2 Participant observation: My status and role during the fieldwork

Prior to my stay in Melamchi I had pictured myself doing all kinds of activities as part of the participant observation. However, I soon learned that this would be far from easy as my skills were of limited value in the study area. First of all, I am not a farmer. The farm activities conducted in the study area required skills, precision and speed that I did not have, thus offering to “help” would essentially mean slowing things down and probably result in poor quality of work. This was not really an issue as it would be inappropriate for farmers to let a foreign woman like me conduct any heavy farm work anyway. Informants made jokes about me starting my own farm in Melamchi in a way that made me realize that my chances of being included as part of the agricultural work force were extremely limited. The fact that I

was a foreigner also prevented me from helping out in the kitchen. Foreigners are technically considered “outcaste”, and this would prevent some high-castes from eating the food that I had prepared as it would be considered “polluted”. Because of these limitations the best thing for me to do was to try to fulfil my goals as a participant by joining the local residents in their everyday activities, following their daily routines and practises as best I could.

In order for the researcher to actively take part in social interactions with informants, she has to take on a *status* that is relevant for the social system that is to be studied (Aase and Fossåskaret, 2007). Linton (1936) defines status as a social position embedded with certain rights and duties (e.g. a student has the right to attend relevant lectures at the University, and a duty to hand in assignments and attend exams). In addition to these formal rights and duties there are a number of informal rules and norms associated with a status which are defined as *role expectations*. The status is confirmed when one acts in accordance with the role expectations connected to a particular status, and by doing this the actor performs a *role*. One way of clarifying the difference between status and role is to say that status is what we *are*, and role is what we *do*. For example, I *am* a student (status) and by attending lectures and seminars I *act* like a student (role).

A researcher trying to conduct participant observation has to negotiate a status which exists in the local status inventory. The status inventory can be defined as the total range of statuses in a community (Aase and Fossåskaret, 2007). Only when the researcher has taken on a relevant status she can participate in social interactions and hopefully be permitted access to the social arenas of greatest relevance for the research topic (ibid). During my fieldwork I was made aware of how the various statuses I was assigned by informants provided me access to different social arenas and empirical data. Becoming aware of the role I played in particular situations made it possible to alternate between various statuses. This experience made me realize that the researcher can influence the data that is being produced, whether intentionally or not. Next, I will present some of the statuses that I was associated with during the fieldwork with reference to particular situations where they were illuminated or challenged.

“Where is the rest of your group?”

The first few days in Melamchi I was considered just another western tourist passing through the area. This reaction was not unexpected as most foreigners visiting the village are trekker tourists on their way to Helambu National Park. The first conversations I had with locals usually started with them asking me when, or where, I was going trekking, or where the rest

of my group was staying. Both my appearance and behaviour made it clear that I was an “outsider”, and the conversations generated by the tourist status were limited. I realized that this status would give me little access to informants and relevant data. The way of “escaping” a status that you are not content with is to act in contradiction to the role expectations (Aase and Fossåskaret, 2007). If the researcher is not acting according to the role expectations, people will most likely find another status that fits better.

After a few days, I noticed that the locals were finding my behaviour both strange and unsettling. If I was a tourist then why had I not left yet? Most people seemed surprised when I told them that I had planned to stay in Melamchi for almost two months with no intention of going trekking. The fact that I was staying alone was also unusual. A lot of people asked me “*don’t you have any friends?*” which I eventually understood did not have anything to do with my social skills, rather it was just seen as uncommon that I had no travel company. I had most of my meals at the guesthouse where I stayed, but unlike the Nepali guests I was always provided with a spoon when I ordered food. One way of escaping my tourist status was that I left the spoon unused and started eating using my right hand, trying my best to copy the technique I had seen others use. This caused a lot of fun for those who saw me struggling to avoid spilling food all over myself, the table and the floor. The guesthouse owners had a two year old son who started laughing and shouting “*Hath! Hath*” (meaning hand in Nepali) every time he saw me eating. This behaviour did not match the tourist status, and I had to get a new one.

“You know this already”

According to my interpreter this area had been subject of many research projects and activities initiated by outside donors, NGOs and governmental organisations. Most people were familiar with researchers visiting the area, and therefore the status “researcher” was part of the local status inventory. People were very helpful and I had no trouble accessing informants with the help of my interpreters. As a researcher I was provided with a lot of useful information and was able to discuss more complex issues with informants. In contrast to the basic conversations I had experienced as a tourist I felt that people saw more reason in setting aside time to let us interview them. There was only one problem with this status. Unlike the previous researchers who had visited the area I was not an expert of the topic that I was studying. I often had to ask informants to explain things that they thought I knew already, and this was confusing to many of them. When informants asked for my advice about how to

increase yields, avoid plant disease etc., and I had to admit that they probably knew more about farming than me. Since the informants were used to researchers being experts on the topic that they were studying I was not suited for this status either. In addition, the researchers who had visited the area earlier did not stay alone in the area for more than a few weeks, nor did they eat or sleep in other people's homes.

“You are a teacher!”

After a few weeks in Melamchi I visited a school where I offered my help as a teacher's assistant in English class. This offer was highly appreciated, but I soon realised that the teachers expected my English to be perfect since I was a foreigner and had a University degree. The teacher who had invited me to join him for a ninth grade English class started the class by presenting me to his class before he turned to me and said; *“you can spend this hour teaching us about the development of the English language and English culture. Please start whenever you are ready”*. I had to confess that I knew little about the topic, but offered to tell them something about my country instead. Clearly I did not have the prerequisites to be responsible for these pupils for more than a few lessons.

One of my pupils was the daughter of Kamala, the woman who owned the guest house where I stayed. During lunch break Kamala had brought lunch for her two daughters, and they were sitting in the school yard. Even though I had spoken with her before, I had never actually sat down and explained my reason for being in Melamchi. Now she called me over with a smile on her face. *“You are a teacher!”* she said enthusiastically. Kamala seemed happy with my newly discovered status, especially since it was related to her daughter's education. I was invited to have lunch with them and she proudly told the other mothers that I was staying at her guesthouse. From now on I was referred to as her *“Norwegian chori (daughter)”*, not as a guest. For the rest of my stay we had long conversations almost every day. Kamala seemed much more relaxed and sincere when we spent time together than before this incident. Aase and Fossåskaret (2007) argues that statuses and their associated role expectations are a prerequisite for all social interaction as they make it possible to predict the actions and reactions of others (Aase and Fossåskaret, 2007). When I acted in accordance to the role expectations associated with the teacher status, I gained the trust of Kamala. This status thus served as a foundation for our interaction and conversations. Even though my relationship with Kamala and many of the local children improved by possessing the teacher status, my teaching skills were not sufficient to remain in the teacher status for the rest of my stay.

“I thought we were friends”

My interpreter and I spent a lot of time together throughout the fieldwork. We visited almost fifty households, we travelled together, and I had lunch and dinner at his house several times. He eventually became one of my key informants and a good friend. Since he had spent a lot of time interpreting my interviews and helping me out in various ways I had planned to give him a sum of money for his assistance. We had not discussed his payment until after the work was done, and when I mentioned it he told me that he did not need any payment. According to him it had been a lot of fun visiting households and families that he had not met in a long time. In addition, we both agreed that spending this much time together was a good way of learning about the other person’s language, country and culture.

Still, I felt bad not offering him any money as it is the common standard when hiring an interpreter. Everyone I knew who had hired an interpreter during their fieldwork had told me to pay my interpreter, and I knew that without his help I would not have been able to conduct any interviews. One of the last days I decided to give my interpreter a small amount of money even though he had told me it was unnecessary. I knew how much he and his brother wanted to study and how hard his parents were working to pay for their education, so I thought he would be happy to receive some extra money. Even though he took the money and thanked me, he did not seem as excited as I had imagined. The next day was the last day of his stay in Melamchi, and he had invited me to have dinner at his house before he went back to Kathmandu. When I met him he told me that his mother had been angry with him for accepting the money from me. *“I thought you were friends until she gave you that money”* his mother had said. The rest of the afternoon I tried to convince both him and his family that I had to pay for all the help he had given me. Finally, I told them that the reason why I had given him the money was that my supervisor had instructed me to pay the interpreter. Since I could not argue with my supervisor, I had to give my interpreter some money even though I knew he did not expect any payment. With this explanation we could enjoy the meal without further questioning.

In this situation I experienced a role conflict being both a *friend* who would never have paid money for another friend’s help, and a *researcher* who is obliged to pay the interpreter. Tor Aase experienced a similar problem during his fieldwork in Pakistan (presented in Aase and Fossåskaret, 2007). He could not pay for his stay with money as this was considered rude, but instead he started giving gifts to the family where he stayed and other people who had helped him. In this way he avoided offending people, but still managed to give something back for

providing him with food and a place to stay. In retrospect, I realize that I could have solved my problem in a similar manner with buying my interpreter or his family gifts instead of handing him a sum of money.

2.1.3 Household survey

The household survey was conducted with 54 respondents and provided an important part of the fieldwork data. Even though the sample size is relatively small, the number and composition of the respondents were sufficient to address my research questions. The aim of this survey has been to provide an understanding of the general characteristics of the local farming system and some aspects of the nature of gender roles and relations in Melamchi. The sample of respondents selected for the household survey can be defined as purposive. “Purposive sampling consists of detecting cases within extreme situations as for certain characteristics or cases within a wide range of situations in order to maximize variation, that is, to have all the possible situations” (Gobo, 2004: 448).

Even though I had a clear idea of which respondents I wanted to include in the sample to increase variation, the actual sample for the survey depended on access to respondents and my interpreter’s contacts and preferences. Whether my sample is representative for the population has not been an important consideration in my case. In order to select a perfectly representative sample I would have needed to have sufficient information about everyone in the study area. For example, if the total population consisted of 200 households categorized as “wealthy” and 100 “poor” households, a representative sample should consist of twice as many respondents from “wealthy” households than from “poor” households. I did not have this kind of detailed information, and did not consider this to be of great relevance for my research. Instead, the respondents in my purposive sample can be said to represent households with diverse characteristics in terms of caste and ethnicity, gender, wealth level, household composition and size.

My survey included 15 structured and unstructured questions. Some of the questions were used as a basis for the quantitative analyses conducted in SPSS, consisting of frequencies, cross-tables and correlation analyses. Even though the household surveys had a relatively strict format, they usually ended up as informal interviews if the informant had mentioned some interesting topic or issue, or if anything seemed unclear.

2.1.4 Interviews and field conversations

I conducted several semi-structured interviews during my fieldwork. Semi-structured interviews are one of the most common methods used in social science, mainly because they are "reasonably informal or conversational in nature and are flexible in a in that they can be used in conjunction with a variety of other methods and theories"(Longhurst, 2010: 106). Before each interview I made a list of topics and potential questions that served as a basis for the interview. One of the major strengths of the semi-structured interview is that it allows the researcher to alter the interview guide during the interview, making it possible to explore interesting topics and elaborate on issues that are difficult to understand. "Although the interviewer prepares a list of predetermined questions, semi-structured interviews unfold in a conversational manner offering participants the chance to explore issues they feel are important"(Longhurst, 2010: 103).

Most of the interviews were assisted by my interpreter, but in the few cases where informants spoke English I conducted the interviews on my own. This increased my control over how the questions were formulated, and made it easier to formulate follow-up questions that seemed natural to our conversation. I did not use a tape recorder, but took extensive notes both during and after each interview.

As mentioned earlier, some answers given during interviews proved not to be exact accounts of reality. The reason for this might be that informants gave me an answer that seemed more appropriate than their honest response. Interview responses are produced in the interaction between interviewer and respondent, and various researchers have recognized "the interviewer effect" which shapes the answers produced during interviews as the respondent says what she thinks the interviewer wants to hear (Järvinen, 2005). This can be influenced by gender (Flores-Macias and Lawson, 2008), age (Norris and Hatcher, 1994), race and appearance of the interviewer, or by interview language, style and expectations related to the interview (Gong and Aadland, 2010, Oyinlade and Losen, 2014). One reason why the interviewer effect occurs is that people generally want to please others and try to show the sides of oneself which seems most suitable in the current situation (Järvinen, 2005). Even though I was aware of the interviewer effect, it was impossible for me to change the fundamental characteristics of my persona. Instead, I focused on ensuring a safe interview

setting for all informants and to minimize possible errors by asking follow-up questions forcing the informants to elaborate on their own replies.

In addition to the formulated interviews, I did a lot of informal interviews that can better be described as field conversations. Field conversations are similar to everyday conversations among people and are based on the interactions observed (Aase and Fossåskaret, 2007). Both informants and I were usually more relaxed during field conversations than in the interview setting. I took few or no notes before the conversation had ended as I felt that would be a disturbing factor considering the interview had not been formally arranged. It would also create an unnecessary distance between me and the informant that one tries to avoid during field conversations.

2.1.5 Additional methods

In addition to the methods mentioned above, I kept a field journal which I wrote in almost every day of the fieldwork. In it I described interesting situations, local stories and every day activities that had not been mentioned in the notes from the interviews and household surveys. In this way, the field journal provided a nuanced and context-focused description of my study area. I also asked some of my informants to help me sketch up an agricultural calendar which provide extensive information about the various crops that are grown in the area, and illustrate how the amount of agricultural work varies throughout the year. The first part of the household survey was dedicated to draw a *pariwar* (household) map with the help of the respondents. In this way they were actively involved in the data production. All members of the household were represented in the map with information about their age, gender, civil status and other relevant features. The relations among the household members were clarified by drawing lines that connected them to each other.

I had also been provided with a small printer that made it possible to print some of the pictures taken during the fieldwork. This made *photo eliciting* possible, asking informants to identify and explain something that I had photographed. An example could be a type of crop or tool that I did not know. I could then photograph it and show the image to my informants so that they could tell me what it was and explain the usage of it. The printer was also used to print pictures of some of my informants and their family members. People really appreciated it when I revisited their homes with photos I had taken during the previous visit. Returning to

the same houses multiple times sometimes provided me with additional information as the trust between me and the informants increased, and new topics could be explored each time.

2.2 Methodological challenges

In this section some general challenges faced while conducting the research project will be presented. Firstly, challenges related to working with an interpreter will be mentioned before reflecting on some relevant ethical considerations associated with the collection of data and the data analysis. Lastly, a description of how the data produced was used to answer my research questions through interpretation and analysis will be presented. Hopefully, being open and honest about the limitations and possible sources of error related to my research can strengthen the validity of the results presented later in this thesis.

2.2.1 Working with an interpreter

One of the biggest challenges I faced during my fieldwork was the language barrier. I did not speak Nepali and most of my informant spoke little or no English. Thus, I needed an interpreter in order to conduct the interviews. Temple and Edwards (2002) writes that in many research articles the interpreter is seen as a tool which the writer tries to erase from the text. In order to enhance the legitimacy of the research I have tried to make my interpreters visible in this thesis in the same way as I have tried to be explicit about my own impact on the research.

With the help of a local contact I was able to find an interpreter just a few days after I arrived in Melamchi. He was a nineteen year old boy from Melamchi who was currently living in Kathmandu due to his studies. At the time he was staying at home preparing for his upcoming exams, and after he left for Kathmandu one of his younger relatives offered to be my interpreter for the last few interviews. Prior to my fieldwork I had hoped to work with a female interpreter as it might make it easier to get in contact with female informants. It was difficult to find a girl with sufficient English skills and the time and opportunity to be my interpreter. Luckily, it proved to be no problem for my interpreters to approach female informants.

I had no way of controlling whether my interpreters translated responses word for word or if they made any modifications to informants' replies. Some citations are included in this thesis in order to give a more direct representation of my informant's replies, but one might question

whether the citations are completely correct after they have been translated from Nepali to English. Even in cases where informant and informant speak the same language misunderstandings might occur, but asking follow-up questions or reformulating unclear questions can reduce the risk of misunderstanding and mistranslation. Using two different interpreters might have resulted in a strengthening of the rightfulness of the translations as the informants' answers were fairly similar even though two different people were interpreting. The similarity of the interpretations supported my belief that the interpreters had understood my questions and that the responses had been translated in an acceptable way.

According to Freed (1988) interviews conducted with a professional interpreter are more effective than those conducted with an inexperienced interpreter. In addition, a professional interpreter could easier undertake an appropriate role and not dominate the interview. "The interpreter is a conduit linking the interviewer with the interviewee and ideally is a neutral party who should not add or subtract from what the primary parties communicate to each other" (Freed, 1988: 316). I disagree with Freed's statement as total neutrality of the interpreter in an interview situation is unachievable. The interpreters will inevitably have some kind of effect on the research and therefore I find it important to make the reader aware of the possible influence exercised by them. It seemed like the fact that my interpreters were locals made it easier to approach informants, and their young age and respectful manners made them less "intimidating" for both men and women than an older and more experienced interpreter might have been. Before the interviews my interpreters and I discussed the questionnaire to make sure that we had the same understanding of the questions.

2.2.2 Ethical concerns

Research should not have a negative effect on those who are being studied. Ethical considerations are important in order to secure good scientific practice and ensure the respect of the individuals and societies that are being researched (Hay, 2010: 36). The problem is that ethical problems are generally not clear-cut and finally resolvable, which demands for the researcher to constantly reflect on these issues.

Without my informants this thesis would not have become a reality. The fact that I did not offer them anything in return for their time and information increases my wish to represent their situation and the empirical material in a way that they would be content with. I tried to act respectfully both throughout the fieldwork and in the process of data deliberation and

representation. The interviews were all conducted with the approval of informants, but observations and personal reflexions that have shaped this thesis have not always been clarified and discussed with informants.

I will now present a situation from an interview conducted in a nearby village. Before each interview my interpreter introduced us, the research topic and what questions we were going to ask. Informants usually agreed to be interviewed with a short reply or gesture, but this time they continued the conversation for quite a while before my interpreter turned towards me and said: *“I will tell you what we are talking about later”*. After the interview had finished he explained that he had introduced me as a representative from an international organization. In addition, he had told the informants that if they gave me good and informative answers I might return the favour and provide them with financial support or a tractor. He had told this lie in order to feel less uncomfortable asking them for an interview as he did not know anyone in this village. I am not sure whether giving the respondents a false reason for answering my questions had any effect on their replies, but it might have made it difficult for them to refuse to answer questions or to admit that they did not have a proper answer. Anyway, I made my interpreter promise that he would never anything like this again.

Some of the interviews were initially done with one informant but ended up as a group interview as people gathered around us. Having an audience while being interviewed may influence the answers given as informants can feel obliged to give answers that the others agrees with. I tried to avoid this by asking additional questions or by encouraging informants to elaborate on their own replies. Even though all informants gave formal consent to and could choose to terminate the interviews anytime during the interview session, all of my informants have been anonymised. The names used in this thesis are not the right name of the informants, but pseudonyms in the form of common Nepalese names.

Ethical issues that have to be considered when using methods like observation and field conversations are often complex and therefore largely depends on the researchers own ethical judgement (Aase and Fossåskaret, 2007). Hopefully I have managed to represent informants and their community in a respectful manner. At the same time I have tried not to leave out any information to please the informants, or to make my research seem more interesting or revolutionary.

2.3 Analysing data

Qualitative research is characterised by an interpretive nature. In order for observations to become data they have to be interpreted by the researcher. Hence, data is not passively collected but actively produced by the researcher (Aase and Fossåskaret, 2007). Coding and categorizing of the data material are core activities in the qualitative analyse process. After finishing the fieldwork, the researcher is left with a substantial amount of data. Coding is the first step in the process of reducing the substantial amount of data produced to a small number of themes or categories that traps the essence of the material. This work includes identifying parts of the text like sentences, expressions, actions or statements that are of interest to the research topic (Nilssen, 2014). Through coding the researcher identifies the important data in the material, and the less important material which can be characterised as “disturbance” is left aside. After coding the data material it is possible for the researcher to include the codes in different categories. The aim is to be left with a few categories, themes or perspectives that can provide answers to the research questions. *Categories* can be understood as containers which we can organize the observations in. The ability to categorize observations is a method for systematizing and making sense of our surroundings. By organising observations in categories we are making sense of the world around us; we assign the phenomena meaning (Aase and Fossåskaret, 2007). Categories are mainly taught through experience, but they also vary with culture. When conducting a research project in another culture, it is extra important to be aware of the local understandings of concepts and categories in order to avoid misunderstanding. When informants told me that I had a long nose I thought that they were making fun of me, but after learning that the high-caste Brahmins are often characterized with long noses, I understood that informants had actually tried to complement me for looking like a high-caste.

When analysing data the researcher has to avoid merely repeating the informants’ answers and rather try to use analytical or theoretical terms in combination with the primary data. The theoretical framework can be seen as the theories surrounding the study emphasising particular concepts, understanding and questions (Nilssen, 2014). The theoretical framework of this thesis has a clear emphasis on feminist perspectives. The goal of a feminist research project is not to find the absolute truth and represent reality through the research. Feminists’ have contested the reliability of research, in the sense of what can be replicated by other researchers, and they argue that context, the researcher herself and her interpretations will

vary no matter how structured and cautiously the research is conducted. The notion of valid knowledge and how (or whether) such knowledge can actually be achieved has also been questioned (Ramazanoglu and Holland, 2002). Being aware and open about the research's limitations and how both researcher and interpreters might alter the situation that is being studied are important issues considered in feminist research.

Even though this research has been shaped by a feminist perspective, the theories that have been used to interpret and explain the data are not exclusively feministic. Theories give meaning to qualitative data and they have been used in combination with scientific concepts, existing literature and my own observations and reflections to help me understand, interpret and explain the data in relation to the research questions. Applying formal and precisely defined concepts, and discussing the data with reference to known theories might enhance the communication of findings and ensure a deeper understanding of the analyses and discussions presented. The theoretical framework and some relevant theories and concepts for this study will be presented in the next chapter.

CHAPTER 3: THEORETICAL FRAMEWORK

After finishing my field work I was left with a substantial amount of data. In order to understand this complex data material a theoretical framework was needed. The theoretical framework assists the researcher in understanding how other social scientists perceive the world and provide guidelines for the study (Aitken and Valentine, 2006). This thesis aims at investigating the local farming system of my study area, gender roles and relations, and the division of labour and managerial responsibilities between men and women in the context of Melamchi. In order to discuss these topics the analysis will draw on theories related to farming systems and concepts of gender and feminism. A short introduction of previous research of gender and development, and some gender equality indicators with examples from Nepal will also be presented. Lastly, Weber's (1968) theory of the three types of legitimate domination will be introduced as it will be used to explain how the authority of decision-makers in Melamchi is legitimized.

The theories presented in this chapter have served as a basis for my analysis and shaped my understanding of the data material. "Theory is a combination of both conceptualizations of phenomena and an explanation of how phenomena work, exists or articulate" (Moss, 2002: 13). These concepts and explanations have been constructed by other researchers, and are related to other contexts and studies than mine. That is why I will try to relate the theories presented here to my research questions and the specific context of my study.

3.1 Farming systems and the farming systems approach

From the late 1960s researchers and politicians put a strong focus on agricultural innovations and different techniques for increasing agricultural production (IFPRI, 2002). As a result, researchers gained better knowledge about biology, developed improved plant varieties and suggested an expanded usage of chemical fertilizers and irrigation in agricultural production. This led to dramatic yield increases in Latin America and Asia, a development which was termed the "Green Revolution" (ibid).

By the 1970s, development practitioners became aware of the fact that the agricultural innovations following the Green Revolution were more easily accrued by the wealthier farmers who owned more land and equipment and had the finance to buy agricultural inputs like fertilizers and pesticides (Poats et al., 1988). Simultaneously, it was recognized that small

farmers constituted majority of producers and were more directly responsible for the welfare of rural families and communities. Farming systems research emerged as a response to the challenge of designing appropriate technologies for these low-resource farmers (ibid). While the Green Revolution research had a focus on large-scale farming with intensive production in relatively homogenous environments, the *farming system approach* focused on the individual farmers and aimed at understanding their various challenges and production environments.

The farming system approach is not a single approach, but rather an array of different perspectives and methods. However, there are some common elements that underlie most versions of farming systems, that is “an explicit commitment to low-resource producers; a systems approach that recognizes the complexity of small farm enterprises; a focus on the farm family or household; and a recognition of the importance of including farmers in the research and extension process”(Poats et al., 1988: 2). Turner and Brush (1987: 13) defines farming systems as “any level of unit(s) engaged in agricultural production as it is wedded in a social, political, economic, and environmental context”. Further, the authors write that the farming system approach “describes the unit(s) in its context and/or explores some characteristics of the unit(s) in terms of all or parts of the context”(ibid). The farming system approach aims at identifying different processes of the system and the ways that interrelated components function together, yet it is not trying to explain *why* systems work the way they do. The approach can thus be characterized as being descriptive rather than explanatory (Turner and Brush, 1987).

The system concept should be understood as a set of interrelated components and their attributes. The interconnectedness that characterize the system means that changes in any component or attribute will cause changes in the others. Therefore, Turner and Brush (1987) suggest that each individual component and the flow of common entities (e.g. energy, nutrients and money) among the components should be studied in order to understand the system and its changes.

3.1.1 The human subsystem

According to the definition by Turner and Brush (1987), farming systems comprise of three subsystems; human, environmental and genetic. In my thesis, emphasis will be put on the human subsystem which concentrates on the rules that govern resource use, labour intensity and availability demography, innovations, relations between social and economic units,

consumption variables, decision-making, and the links between these features and the environmental subsystem (ibid).

The primary focus of this study is placed on local farming households, and more specifically on the gendered division of agricultural work and managerial decisions regarding agricultural production. In order to investigate these issues I will identify central units of the current farming system in Melamchi and the relations between them. As I interviewed people in Melamchi about their decisions and production strategies it was made clear that the local farmers do not operate in a vacuum, rather they are strongly affected by the context in which they live and function. The behaviour and decisions of farmers should therefore not be analysed in a way that isolate them from the other components of the farming system and their context (Turner and Brush, 1987). A description of the farming system in Melamchi is presented in Chapter 5, and it will serve as a foundation for the subsequent discussion of gender relations and decision-making within households.

3.2 Defining Gender

Gender is diversely defined across and within multiple disciplines. According to UNESCO¹(2003: 1);

Gender refers to the roles and responsibilities of men and women that are created in our families, our societies and our cultures. The concept of gender also includes the expectations held about the characteristics, aptitudes and likely behaviours of both women and men (femininity and masculinity).

Typically, gender has been considered a social construction which draws on certain aspects of the biological sex (Gregson et al., 1997). Sex is assumed to be a natural category based on the biological difference between men and women. It serves as a natural foundation to govern ideas of gender, as gender is seen in relation to sex (ibid). Novelist and feminist Chimamanda Ngozi Adichie (2014) states that the problem with gender is that it prescribes how we should be, rather than recognize how we are. Differential treatment of males and females often starts from the moment they are born, and continues throughout their lives (Adichie, 2014). These actions and attitudes are often so internalized that it is difficult to take notice of. Through various kinds of activities, norms and ways of thinking about the male and female sexes, people are gradually being *gendered by society*.

¹ The United Nations Educational, Scientific and Cultural Organization (UNESCO)

Judith Butler challenges this naturalization of biological binary sex and the concepts of gender. In her most famous book *Gender Trouble* published in 1990, she argues that there is no sex, only gender, and that gender is performative. In short, the theory of performativity revolves around the notion of *doing sex* instead of *being sex*. In the preface of the tenth edition of the book, Butler explains the performativity of gender like this:

The view that gender is performative sought to show that what we take to be an internal essence of gender is manufactured through a sustained set of acts, posited through the gendered stylization of the body. In this way, it showed that what we take to be an "internal" feature of ourselves is one that we anticipate and produce through certain bodily acts, at an extreme, a hallucinatory effect of naturalized gestures (Butler, 1999: xv).

Performativity should not be understood as one single act, but rather as a series of acts through time. Through the repetition of behavioural and linguistic actions learned by heart a “natural” gendered behaviour is produced (Butler, 1999).

Gender is one of the most essential characteristics of human beings, and both gender and gender relations are features that have great influence on people’s lives. It determines how we are perceived by others, and what opportunities and constraints that faces us in various situations in life. Gender roles and relations vary with context, which is why the particular perceptions and interpretations of gender and gender roles in the study area will be discussed later in this thesis.

3.3 Feminism and its epistemology

There are many different and sometimes conflicting interpretations and understanding of the term feminism. According to Rose et al. (1997) the approach should not be called feminism but rather take on the plural form *feminisms*. Even though there are multiple definitions, all feminists are concerned with improving women’s lives in various ways and on different arenas. Feminism can be understood as the theory of the political, economic, and social equality of the sexes (Adichie, 2014). It is the belief that men and women should have equal rights and opportunities. Others understand feminism as *praxis*, a form of political engagement aiming to analyse and to change inequitable and unjust social relations (Moss, 2002).

Epistemology can be understood as a theory of knowledge that is particularly concerned with how knowledge is produced. Megan Cope (2002) argues that knowledge is not simply “out

there” waiting to be acquired, rather, people are active participants in producing what counts as knowledge. By recognizing that knowledge is produced by humans it is inevitable that there exists multiple and even contradictory perspectives, interpretations and usages of knowledge. Thus the production of knowledge is never an unbiased or value-free process (ibid). Historically, women’s participation in the production of knowledge has been seen as less important than men’s. This is why feminist epistemology draws attention to how considerations of gender might influence what counts as knowledge and how knowledge is legitimized, reproduced and represented to others(Cope, 2002).

Critiques of male-dominated research and “gender-blind” theories throughout the 1970s resulted in an emergence of a feminist movement in research and development approaches. According to Monk and Hanson(1982) research may be dangerously impoverished if gender is omitted even when it might be an important explanatory variable. They argue that research would benefit from becoming *gender-sighted* rather than remaining gender-blind. “As long as gender roles significantly define the lives of women and men, it will be fruitful to include gender as a potentially important variable in many research contexts” (Monk and Hanson, 1982 :42).

3.4 Feminism in geography

Gender issues emerged in geography in the 1970s as a result of the political context addressing the unequal status of women in society. People started pointing out the “blindness” in geographical thinking about women’s roles in society, as well as the lack of women actually doing, or being the topic of, geographical research (Bäschlin, 2002). Today, feminist geographers are first and foremost concerned with “improving women’s lives by understanding the sources, dynamics, and spatiality of women’s oppression, and with documenting strategies of resistance” (Dixon and Jones III, 2006: 42). Feminist geographers have a special focus on recognizing the importance of space and place in order to understand gender issues, which is why feminist geographic research often investigates context-specific issues. In addition, feminist geographers have focused their studies on different types of female oppression and oppressive social structures like patriarchy. Researching specific examples of patriarchal relations is complicated by the recognition that this structure is always socially, historically, and geographically specific. “In other words, there is no single patriarchy, but a multitude of variations. This variation ensues in large part from the way

patriarchy intersects with other kinds of social structures [...]”(Dixon and Jones III, 2006: 48).

Dixon and Jones III (2006) present three main lines of research in feminist geographies. The first heading, *gender as difference* includes analyses that address the spatial dimensions of various life experiences of men and women across a host of cultural, economic, political and environmental arenas. Secondly, they have identified analyses that see *gender as a social relation*, putting emphasis on the social relations that link men and women in complex ways. The third line of research identified by the authors examines the ways in which *gender as a social construction* has been imbued with particular meanings, both positive and negative (Dixon and Jones III, 2006: 42).

My research is best described as having a focus on *gender as difference* and *gender as a social relation*. Focus is placed on gender inequality, division of labour and managerial responsibilities and the way gender roles and social relations shape the reality and everyday-lives of my informants. It is important to remember that women are not a homogenous group, and that women’s experiences are not universal. The goal of this thesis has not been to create an all-encompassing “truth” about the local situation, but rather to favour the context-specific knowledges of the study area as suggested by Dixon and Jones III (2006). Interviewing women of different age, caste and civil status, might also broaden the understanding of women’s experiences, their role in the local farming system, in households and decision-making processes. Even though the women’s stories and experiences were of particular interest for the research topic, it was important for me to include both male and female informants. Including men’s opinions and thoughts about gender roles and relations will hopefully ensure a fuller understanding of the situation.

3.5 Gender issues in development and agriculture

Feminist theories have evolved in various fields of development and environmental perspectives in the last decades. With her book *Woman’s role in economic development* published in 1970, Ester Boserup became a pioneer in this field of study. Boserup gave attention to the importance of women in agricultural production, especially in the rural labour force. She found that gender was a basic factor in the division of labour in all parts of the world.

Even at the most primitive stages of family autarky there is some division of labour within the family, the main criteria for the division being that of age and sex. [...] Both in primitive and in more developed communities, the traditional division of labour within the farm family is usually considered 'natural' in the sense of being obviously and originally imposed by the sex difference itself (Boserup, 1970: 3).

Despite the stereotypical division of labour based on sex and the concentration of women in domestic work, Boserup still found significant differences in women's work across countries and regions. She conducted several comparative analyses of different regions of the world, and found a strong cultural diversity in the gendered division of labour in agricultural production. According to her analyses women played a much more fundamental role in African agriculture than in Asian agriculture. The main reasons for this difference were lower population density, easier access to land, and less class differentiation in Africa. In Asia, the high population density provided a ready supply of landless labourers available for hire and the "technical nature of farming operations under plough cultivation" discouraged women's involvement in agricultural tasks and encouraged segregation of the sexes (Boserup, 1970). 45 years after this study was conducted the relevance of the descriptions presented by Boserup can be discussed, but the assumptions about the Asian agriculture will not be further investigated in this thesis.

Boserup identifies two kinds of subsistence agriculture; one where food production is taken care of by women with little help from men, and one where food is produced by men with relatively little help from women. These were named female- and male systems of farming (Boserup, 1970). Boserup suggested that an increase in population density will "force" development through innovations, as the population increase calls for a change of the agricultural system towards higher intensity. Increased population density and technological development introduces a shift from female subsistence farming to a male farming system which is more intensely driven (Boserup, 1970). This will have a negative effect on the female farmers as they lose responsibility in agricultural production. The effects of the Green Revolution accompanied by a great population growth in Asia might have caused a situation where male systems of farming dominated the agricultural production, but today, 45 years later, we cannot accept these findings as the ultimate truth. Boserup's writings have inspired many other researchers to study the role of women in agriculture, especially within WED research.

Women, environment and development (WED) is an approach within development research which connects environmental degradation, increasing poverty and gender inequality (Arnegaard and Svarstad, 2002). The WED researchers formulated strategies for increased participation of women in the development process since they saw this as a necessity for eradicating the problems presented above. This approach became popular by the end of the 1970s when researchers realised that the earth's natural resources are limited, and a strong focus was put on environmental degradation. The WED literature depicted women as the "prime victims of environmental degradation and increased poverty, but also as prime managers of the resources who has been invisible to and excluded by policy makers and projects" (Buchy and Rai, 2008: 131). The WED scholars argued that these challenges were strongly connected and tried to combine them in research, as solving any of them could not be done without taking the others into account. Since women are depicted as the main users and holders of specific environmental knowledge, they were given extra attention.

One distinct movement within the WED literature is ecofeminism. Ecofeminists view both women and nature as oppressed victims of patriarchal power structures and "development" (Arnegaard and Svarstad, 2002). Because women are closer to nature than men, it is taken as self-evident that to harm nature is to harm women (Jackson, 1993). One of the most famous contributors of this movement is Vandana Shiva. In one of her earliest works, *Staying Alive* (1989), Shiva argues that women share a special bond with nature which makes them better suited to take care of the environment than men. If women could choose freely what kind of agricultural production to perform, they would chose a sustainable, self-subsistence production, while men would take part in intensive, cash crop production that degrades the environment. "Women produce and reproduce life not merely biologically, but also through their social role in providing sustenance" (Shiva, 1989: 42). If this is true, the environment should gain from women being in charge of agricultural production. Ecofeminists argue that women's interest and environmental conservation is two sides of the same coin. In the words of Vandana Shiva: "Women want development that ensures water and food. Men want development that generates cash and contracts"(Shiva, 1985, cited in Jackson, 1993: 1948). Cecilie Jackson (1993) disagrees with this statement and claims that even though environmental-friendly management practices performed by women are often "understood with an implicit assumption that women are caring, nurturing and selfless beings committed to both future generations and the environment for its own sake" (Jackson, 1993: 1948), in reality most of them can be explained in terms of rational short-term interest. Montimart

(1991, cited in Arnegaard and Svarstad, 2002) presented a report from a tree-planting project that had been initiated in six countries of the Sahel in order to fight decertification and empower the female participants. The report concluded that the women working on this project with no other payment than food do so because they have such strong feelings for the environment, but other researchers have pointed to various factors that might have caused this claimed passion for environmental protection. These women are the poorest in the society and do not have a lot of opportunities for paid work, so attending this project is better than not having any work at all. Hence, the women are not necessarily participating because they are concerned with saving the environment (Arnegaard and Svarstad, 2002).

In line with arguments presented by WED researchers and ecofeminists there will be a clear change in the way that agriculture is performed if women take over the responsibility of managing the farm, and agricultural production will take a more environmentally friendly direction. Whether this hypothesis is a credible future trajectory for Melamchi agriculture will be discussed in the final chapter of this thesis.

3.6 Gender inequality

Gender equality, or more often inequality, has become a much used measure for national development. The United Nations has recognized gender inequality as a major barrier to human development. “All too often, women and girls are discriminated against in health, education, political representation, labour market, etc. – with negative repercussions for the development of their capabilities and their freedom of choice” (UN, 2014). To better expose the disparities between males and females, the Gender Inequality Index (GII) has been introduced. The GII can be used as a tool for determining inequalities between men and women by identifying various human development measures like reproductive health, employment and co-determination. The values are found between 0 (total equality) and 1 (total inequality). Figure 1 shows Nepal’s GII values from the years 2005, 2010, 2012 and 2014. The GII value of Nepal has decreased from 0,627 in year 2005 to 0,479 in 2014, which means that the equality between women and men in Nepal has increased in the last decade. Still the country was ranked as number 98 out of the 152 countries that were included in the 2014 index, indicating that even though the GII has decreased, the status of Nepali women remains low.

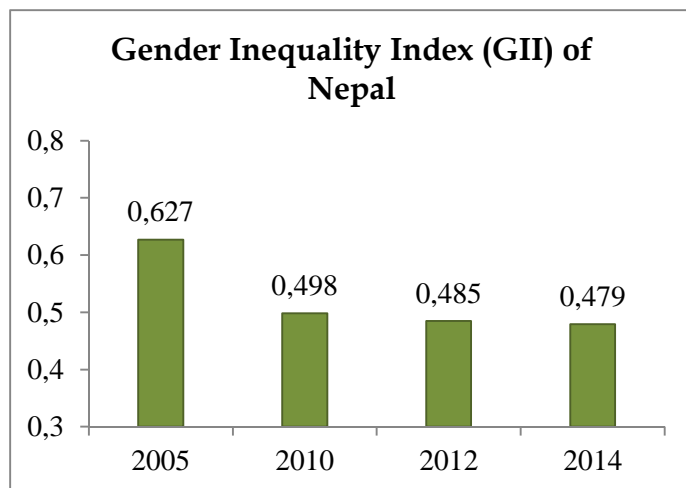


Figure 1: Gender Inequality Index of Nepal. (Source: UN, 2014)

The major problem with the presentation of gender inequality in Nepal shown in Figure 1 is that it only illustrated the national average, thus local variations cannot be detected. In Chapter 4, more information about education and literacy rate in the study area will be presented.

3.7 Gender roles and relations in Nepal

As in many other countries, Nepal has a patriarchal family system men have the authority to act as household heads and to hold the main responsibilities for decision-making and public duties (Niraula and Morgan, 1996). “For any work, a woman always has to follow the decision of male, her husband, or son. The father or the head of the family, on behalf of the family takes the economical[sic] activities and main decision”(Poudyal, 2003: 275). There are many practices and beliefs in the Nepali society that indicates a clear difference in the position and opportunities of men and women. “The situation for women is characterized by low levels of access to education, healthcare, and economic social, and political opportunities” (Mahat, 2003: 67). According to Subedi (2010) the reason why priority in educational opportunities is given to sons is because men are seen as protectors and providers of the family, while women are seen as homemakers and helpers.

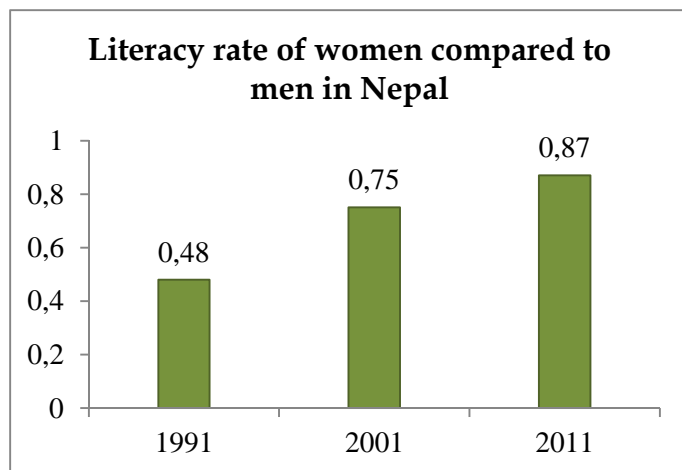


Figure 2: Literacy rate of women compared to men in Nepal. (Source: Globalis, 2014)

Figure 2 shows the literacy rate of Nepali women aged 15-24 compared to men in the same age group. A value of 1 indicates that the literacy rate of women is the same as men's, which is the standard they have been compared to. The figure shows data from the years 1991, 2001 and 2011, and gives a clear indication that the inequality in access to education has been decreasing which has had a positive effect on women's literacy rate. Older women still have high levels of illiteracy compared to men (Subedi, 2010), but if the positive trend illustrated in Figure 2 continues over a longer period of time this gap will continue to decrease and eventually close completely.

The social discrimination against women is tightly connected to legal provisions, which deprive women from getting equal opportunities to men (Mahat, 2003). For many years Nepalese women have not been allowed to inherit property mainly because of the tradition of patrilineality, where property and titles follows a male line of inheritance. The Property Right Law of 2001 stated that sons and daughters had equal rights until marriage, but after marrying, daughters were obliged to return all property to their parents (Poudyal, 2003). This law has been reformed in later years, but unfortunately, changing the law has not changed the practise, and in many cases women are still denied access to property that is rightfully theirs (Subedi, 2010). This in turn makes it difficult for women to get access to credit as formal lending institutions seek tangible collateral for loans (Mahat, 2003). These discriminatory practices are reinforced by women's confinement to household activities. "While homemaking activities are essential for the survival of the household, they fall outside the formal economy"(Mahat, 2003: 70).

Many Nepali communities perform the tradition of virilocality/patrilocality². “Daughters have to leave their father’s home after the wedding and live the rest of their lives, serving in-laws. Thus, females are treated as someone else’s property” (Poudyal, 2003: 283). The position of a female household member can be further weakened if she is not “originally” part of the new household, community or caste. Patrilocality has also been highlighted as an explanation for why girls receive less nutrition and health care, and fewer years of education than boys in many developing countries (Kevane and Levine, 2003, Chen et al., 2011). One can imagine that it will affect women’s authority in decision-making processes if she is not living in her natal household. Chen et.al(2011) studied the effects of child-gender on short- and medium term investments in productive inputs in Nepal. They found that the use of agricultural inputs and labour was generally higher in households with sons. “Gender composition inside agricultural households appears to be exerting some influence over household behaviour in the context of use of productive agricultural inputs”(Chen et al., 2011: 567). They relate these findings to the tradition of virilocality. A daughter will most likely move away when she gets married while a son will stay with his family and ensure the social security of his parents as they age. “Investments in male children in the first period ensures that in the second period the son is available to support his elderly parents thereby acting as a substitute for the parents’ social security”(Chen et al., 2011: 562). The relationship between gender composition of households and investments in agricultural inputs has not been further explored in this study, but the existence of such relationships has been highlighted to illustrate its possible influence and encourage others to investigate it further in another study.

Gender is one of the most fundamental aspects of self, and a common way of categorizing people. It is evident that men and women face certain constraints and opportunities based on their gender. In Nepal, men are generally recognized as more appropriate decision-makers than women, hence it can be expected that decisions in households in Melamchi are predominantly made by men. If this is the case, it seems relevant to question why men’s domination in decision-making is accepted by the other household members.

² Virilocality= the wife moves in with her husband. Patrilocality= the wife moves to live in the house of her husband’s father. In practice this will result in the same arrangement in communities where sons live with their parents.

3.9 Weber's theory of domination

In order to study how authority is legitimized in households in Melamchi I will use Max Weber's theory of domination, formulated in his famous book *Economy and Society* (1922), and particularly his classification of *three types of legitimate domination*. Legitimate domination differs from other kinds of domination because it represents a kind of power that is accepted by those who are being ruled over. According to Weber authority is an expression of legitimate domination, and he describes it as power that is recognized as legitimate and rightful by those in power as well as the powerless (Weber, 1968). Legitimate domination occurs when someone disclaims part of their own autonomy in favour of someone else, as a form of voluntary obedience.

Weber classified three types of authority according to the kind of claim to legitimacy that is typically made by each (Allen, 2004). The three types of legitimate domination (authority) are; traditional authority, legal-rational authority and charismatic authority. *Traditional authority* rests on a belief in the purity of ancient tradition and custom, and the legitimacy of those exercising authority under them. Subordinates obey their leaders because "that's what we have always done". Traditional leaders like kings, sultans and emperors, tribal chiefs and patriarchs all exercise this kind of domination. *Legal-rational authority* (sometimes referred to as bureaucratic authority) is based on a carefully constructed and commonly accepted set of rules, and the right of those elevated to authority under such rules to issue commands. Bureaucratic officials or elected leaders hold this kind of authority. *Charismatic authority* is based on the leader's personal charisma and enthusiasm. It grows out of the personal charm or strength of an individual, and the domination rests on the devotion people show this person as the best possible leader. Revolutionary leaders, prophets and warriors are examples of characters that exercise charismatic authority. Charismatic authority does not have the longevity of the two other types of authority, as it is impossible to transfer charisma from one leader to another (Weber, 1968, Allen, 2004).

According to Weber it is possible to identify the three ideal types of legitimate domination listed above in history, but he does not claim that they always occur exactly as described. "These ideal types are not necessarily found in pure forms in the real world but they are useful yardsticks to measure reality against" (Allen, 2004: 100). An *ideal type* can be understood as a model, or a simplification of reality, where typical features of a social phenomenon are outlined. It provides the researcher with a tool for distinguishing the most essential aspects of phenomena which makes them more manageable for analyses. Using ideal types enables the

researcher to analyse the degree to which specific an observation fit a certain model (ideal type), or how much it differs from it. Ideal types are inevitably related to context as perceptions of particular phenomena vary among different countries and cultures. This is why the particular context of my study area will be presented before I discuss the relevance of Weber's theory for this research.

Hopefully, the classifications of the three types of legitimate domination can be useful in analyses of how the authority of decision-makers in Melamchi is legitimized which aims at providing an answer to the third research question. As mentioned, it is expected that men are in charge of major decisions in households in Melamchi because of the existence of strong patriarchal structures in Nepal. Therefore I suggest that the *traditional authority* plays a central part in legitimizing men's authority in households, while *charismatic-* and *legal-rational authority* is less relevant in this case. This hypothesis will be further discussed and investigated in Chapter 6.

CHAPTER 4: AN INTRODUCTION TO MY STUDY AREA

The purpose of this chapter is to give a general introduction to my study area. In the first part of the chapter some national characteristics of Nepal will be presented, and then focus will be turned to on Sindhupalchowk district and Melamchi VDC³. I will give a short description of the physical environment of the study area, and put focus on societal characteristics like the agricultural production, caste and ethnicity, education and occupation that in sum constitute this complex and diverse community.

4.1 Nepal and the Nepali people

Nepal is a South Asian country located in the Himalayas. The mountainous north of the country contains eight of the world’s ten highest mountains, including *Sagarmatha* (Mt. Everest). Nepal is a small country covering an area of 147 181km². It is landlocked, boarding to India in the south, east and west, and China in the north. The two great neighbours have had severe influence on the country throughout history, which is why Nepal has often been described as “a yam caught between two rocks”(Bhattarai, 2000).

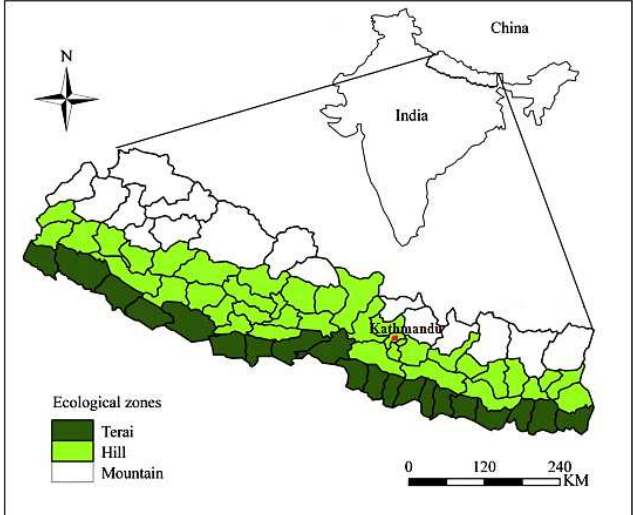


Figure 3: Map of Nepal showing the three ecological zones. *Source: (Chhetri et al., 2012, modified by the author).*

Nepal is commonly divided into three major natural regions (Figure 3) based on elevation and ecological variation; the Mountains, the Hills and the Terai (plains). These ecological regions

³ Village Development Committee (VDC), the lowest administrative unit in Nepal.

are further divided into five regional development units and 75 administrative districts (Bhattarai and Conway, 2010). Within the country's small physical framework both climate and landscape vary greatly. The culture is equally complex which is evident from Nepal being both a multi-ethnic and multi-lingual nation (ibid).

The current population of Nepal is approximately 30,9 million people (CIA, 2014)⁴. Given the fact that the number was only 16,7 million in 1985, it is clear that the country has experienced a tremendous population growth in the recent decades. The original settlement of the Himalayan area was a result of sequential waves of migration of Mongoloids from the east and north and Caucasoid from the west and south. The newcomers migrated in stages, each carrying their livelihood culture to this new habitat (Gurung, 2004). These migratory processes are part of the reason why the population of Nepal is currently divided into more than 75 different castes and ethnic groups (ibid). The high diversity of ethnic groups in Nepal is the reason why the country has several indigenous languages, but the official language *Nepali* is understood and spoken by the majority of the population.

Agriculture is Nepal's main source of livelihood. Majority of the population depend on this sector for food, income and employment, but agriculture is not conducted in the same way all over the country. In the Terai Region (and parts of the Kathmandu valley) the land is intensively driven, and the usage of tractors and various inputs like chemical fertilizers and pesticides are more common. In the Hills, or "the hilly region", which Sindhupalchowk is a part of, subsistence farming is the most common type of agricultural practice. Physical landscape and climatic variation have an obvious impact on the combination of crops and livestock used, but *culture* is also an key factor when determining the choice of crops and the type of technology used for production (Gurung, 2003). Landscape, climate and culture are all fairly stable factors, while technology and praxis have been changing a lot in the resent years. This type of change has been an important driving force resulting in a shift from subsistence growth to a more market oriented production in some parts of the country (ibid).

Tourism has gradually become one of the most important sources of income in Nepal. Nepal is an attractive destination for tourists who want to experience a rich and diverse culture and the majestic mountain scenery. In 2012 more than 800 000 foreign visitors arrived in the country (Ministry of Culture, Tourism and Civil Aviation, 2013).

⁴ This number is based on estimated population growth calculated from a household survey conducted in 2011.

4.1.1 Political history of Nepal

Modern Nepal was established in the latter part of the 18th century when the Gorkha ruler Prithvi Narayan Shah formed a unified country from a number of independent hill states (Gellner, 2007). From 1846, the Shah King line was reduced as Nepal fell under sway of the Rana dynasty who ruled the Kingdom of Nepal until 1950. After a period of increasing discontent against the Rana regime, the Rana rule ended and the sovereignty of the crown was restored. Several different political parties were formed, but in 1960 King Mahendra introduced a *panchayat*, which is a system that forbids all political parties. This prohibition lasted for 30 years before it was overthrown by what has come to be called “the people’s movement”. The movement initiated several demonstrations and street battles before King Birendra (the son of Mahendra) finally agreed to legalise political parties and allow a new constitution (Gellner, 2007).

The situation was still not stabilised, and on February 12th 1996 the Communist Party of Nepal (the Maoists) launched its “People’s War” which resulted in a civil war that lasted for ten years. The main objectives of the Maoists were to establish a people’s republic and elect a constituent assembly to draft a new constitution for the country. Among other things, this would require removing the power of the monarchy.

In April 2006, after a decade of civil war, King Gyanendra gave up power. Later the same year a peace agreement was signed between the Maoists and the main political parties in Nepal. The monarchy was officially abolished in 2007, and elections to the Constituent Assembly were held in April 2008, fulfilling the two major demands of the Maoist movement (Do and Iyer, 2007). The present political situation in Nepal is still unstable and the constitution has yet to be finished, but the country has made important steps towards a lasting peace (Globalis, 2014b).

4.2 Sindhupalchowk district

The study area is part of Sindhupalchowk district, which is located in the Bagmati Zone in the central region of Nepal. The district covers an area of 2542 km², and in the 2011 census a total of 287 798 inhabitants was registered in Sindhupalchowk (CBS, 2012a). The district is characterised by a diverse landscape with great climatic and topographic variations. In fact, the elevation of Sindhupalchowk ranges from 850 to 7080 metres above sea-level (masl). Sindhupalchowk is located close to the capital, and the road distance from the administrative

centre Chautara to Kathmandu is only 85km. Several improvements in road construction and more frequent bus departures have improved the accessibility to the capital substantially over the last years.

Even though most people in Sindhupalchowk are farmers, the district is also rich in tourism resources. One of the most important tourist destinations in the district is Langtang National Park and the Helambu region. Both are popular trekking areas offering tourists a favourable climate and diverse scenery less affected by tourism than the more famous Annapurna and Everest Treks.

Religion occupies a fundamental position in Nepalese life and society. Hinduism is by far the largest religion in the country followed by 81 % of the total population (CBS, 2012a). As in the rest of Nepal, the two largest religions in Sindhupalchowk are Hinduism and Buddhism. Out of the total district population, 59 % are Hindus while 38 % are Buddhists (ibid). Religions like Christianity, Islam and others also exist, but their prevalence and influence is much less apparent.

4.2.1 Migration and the problem of girl- trafficking

Migration is prominent in Sindhupalchowk, and most of the families that I met during my fieldwork had a household member staying outside the home district. The reasons why people migrate are diverse, but a major factor is that the income opportunities are better in cities or foreign countries. Many migrants go to Kathmandu while others migrate out of the country to popular destinations like India, Malaysia, and the Gulf countries (Ministry of Labour and Employment, 2013/2014). A census from 2012 showed that the number of males (5928) going abroad from Sindhupalchowk was significantly higher than the number of females (2032) (Ministry of Culture, Tourism and Civil Aviation, 2013). This might be because males have higher mobility than females, and in addition, the number of unrecorded cases is probably high. In fact, it has been suggested that the number of females is actually higher than that of males. The reason for this is the huge problem of girl-trafficking that is rarely talked about but very much present in Sindhupalchowk, especially in Tamang communities (HECDO, 2014).

A UN report from 2000 defines Trafficking in Persons as:

the recruitment, transportation, transfer, harbouring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the-

abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation (UN, 2000: 2).

In this case, the term exploitation includes different forms of sexual exploitation and prostitution of others, forced labour or services, slavery or practices similar to slavery, servitude or the removal of organs (ibid). Most of these girls and women belong to economically and socially vulnerable communities with low levels of education and little return from their traditional farming to support their livelihood (Subedi, 2010, HECDO, 2014). The girls are being trafficked for forced prostitution mainly to Indian cities, and increasingly to the Middle East. Various NGOs in Nepal and Sindhupalchowk are currently trying to combat trafficking, and provide rehabilitation services for those who have experienced and survived these damaging and illegal activities.

4.3 Melamchi VDC: An overview



Picture 1: *Melamchi bazaar* located by the *Melamchi Khola*

My fieldwork was carried out in Melamchi village and its surroundings. The population of Melamchi is approximately 5200, and the number of households around one thousand (CBS, 2012b). *Melamchi bazaar*⁵ is located in a valley at 870 masl. The two great streams *Melamchi Khola*⁶ and *Indrawati Khola* runs through the valley. The village is located close to where the streams merge together, and I was told that the name Melamchi literally means “meeting

⁵ *Bazaar*= the central area.

⁶ *Khola*= stream/ river.

place”. Melamchi is located approximately 60 km in north-east direction from Kathmandu. The main road to Kathmandu has been greatly improved over the last three years, which has made it possible to reach the capital by car or motorbike in just a couple of hours in the dry season. Busses are still the most common mode of transportation, and busses depart from Melamchi to Kathmandu almost every half hour.

The landscape is characterised by a seemingly never-ending system of valleys forming a wave pattern where every sharp ridge is followed by a curved depression in the terrain. On days with clear weather the raging mountains in Langtang National Park can be seen from Melamchi, creating a surreal and breath-taking backdrop in sharp contrast to the green valley floors. For visitors coming to Melamchi for the first time, it is probably the Melamchi Khola that first catches the eye. Children were often playing by the river, cooling off in the water when temperatures were high.

Earlier, the valley floor was more or less uninhabited as this lower level was malaria infested. The reason for this was the closeness to the river which served as a breeding ground for mosquitos carrying the parasite. Malaria control programmes were introduced and in 1957 the area was declared malaria free. Since then, people have slowly begun to construct new houses closer to the river. This trend further escalated after the establishment of the *bazaar area* and the improvement of the main road to Kathmandu. In recent years a transition in housing material has also taken place. Houses have traditionally been built of stone bricks covered with a clay plaster, while most of the new houses are built of concrete. The roofing material for the houses has also changed from thatch to galvanized iron sheeting. Even though most of the houses are located in the *bazaar area*, several small clusters of houses form patterns on the surrounding hillsides. Each little settlement or group of houses has its own name and identity within the Melamchi area, although the inhabitants identify themselves as being simply from Melamchi when talking to outsiders.

4.3.1 Caste and ethnicity

A central element of social organisation in Melamchi, as in the rest of Nepal, is that of caste and ethnicity. Residents from the same caste often live in the same areas, and inter-caste marriage is still frowned upon by many. This particularly applies for the elderly villagers, as younger people often usually are less concerned with the strict caste rules. Major castes and ethnic groups were officially defined hierarchically in the legal code, *Muluki Ain* of 1845,

which divided the entire population of Nepal into five categories based on relative attribution of ritual purity (Valentin, 2005). The “high-castes” Brahmins and Chhetris were classified as “*tagedhari*, or ‘wearers of the sacred thread’ signifying their status as ‘twice-born’ or those initiated into the sacred Hindu texts” (Bennett et al., 2008: 2). Ethnic groups such as Gurung, Magar and Tamang occupy are classified as “middle-caste”. “Since many of these groups consumed homemade beer and spirits, they were called ‘liquor-drinkers’ or *matwali* by the Brahmins and Chhetris whose caste status did not allow them to take alcohol which was considered polluting” (ibid). The Kami, Damai and the Sarki were called *pani nachalne* or ‘those from whom water cannot be accepted’. These castes were ranked at the very bottom and classified as *achut* or ‘untouchable’. Although the *Muluki Ain* was abolished and deemed illegal in 1963, it still has relevance (Valentin, 2005). The dominant caste in Melamchi is Brahmin and the biggest ethnic group is Tamang, representing 32, 2 % and 27, 7 % of the total population respectively (CBS, 2014). Besides the two most dominant groups, people belonging to Newar, Chhetri, Danuwar, Sarki, Kami and several other caste and ethnic groups are also present in the study area. Most people in Melamchi are Hindu, but some Buddhists also live here (ibid).

4.3.2 Occupation

The main occupation in this area is agriculture, and several small plots of farmland surround the *bazaar area*. Most of the agricultural production takes place in the plain areas close to the riverbanks, but agricultural activities are also performed in some of the steep slopes surrounding the area. The fields are made up of carefully constructed terraces, creating the characteristic appearance that is familiar in large parts of Nepal. The distribution of land ownership in Nepal is highly skewed. The bottom 47 percent of agricultural households operate on less than 15 percent of total agricultural land, while less than 3 percent occupy more than 17 percent of the total land area (CBS 2003, cited in Buchy and Rai, 2008: 131). A more comprehensive description of the farming system and agricultural production in Melamchi will be presented in Chapter 5.

Even though agriculture is the most important occupation in Melamchi, several other businesses are also run in the area. The number and types of shops and businesses have experienced a tremendous growth in the last few years. Construction work is being performed on several different sites, and new buildings seemed to pop up from nowhere at impressing speed. Many people have moved from remote areas to Melamchi in order to seek new

opportunities there. I was told that the land located near the main road that runs through the *bazaar area* had experienced a sudden rise in value, and the price of one of these land plots were now more than three times higher than plots located just off this road.

Many farmers come to Melamchi to sell their agricultural products at the local market place. In addition to these agricultural products, other kinds of commodities are also sold in small shops in *Melamchi bazaar*. Mobile phones have experienced an enormous growth in popularity, and there are currently five shops selling electronic devices in Melamchi. In addition to being involved in commodity trading, people have occupations like construction workers, carpenters, electricians, bankers, teachers, furniture makers, tailors, potters and health workers. There are also a few guesthouses that provide travellers and tourists a place to stay. Restaurants and small tea-shops also ensure some people with jobs, while others work as foresters or millers. Melamchi also has its own police station, and a small army base. Lately, the *Melamchi Water Supply Project* (MWSP) has become one of the most important workplaces in Melamchi.



Picture 2: Various shops located next to the main road in *Melamchi Bazaar*

4.3.3 The Melamchi Water Supply Project

In 1998 the government of Nepal initiated the *Melamchi Water Supply Project* (MWSP) to ease the chronic water shortage in the Kathmandu valley. Water from the *Melamchi Khola* will be diverted into a 26 km long tunnel and led towards the capital. The project has received massive financial funding, but 16 years after the inception it is still unfinished. The project has a local office in Melamchi which was said to provide local people with waged jobs. Unfortunately, most of the key jobs with high salaries are occupied by foreigners. Still, the MWSP has increased the number of paid jobs in the area and provided massive improvements

of the local infrastructure. Generally, the local residents seemed ambivalent about the MWSP. On the one hand, people saw it as an opportunity for waged work, and most of the local boys told me that they wanted to become engineers and work for the MWSP. On the other hand, many people were concerned with the effects this project might have on the local water supply. In addition to farming, fishing activities, water mills and not least the newly established fish farms will be greatly affected by a reduction in the river's water level.

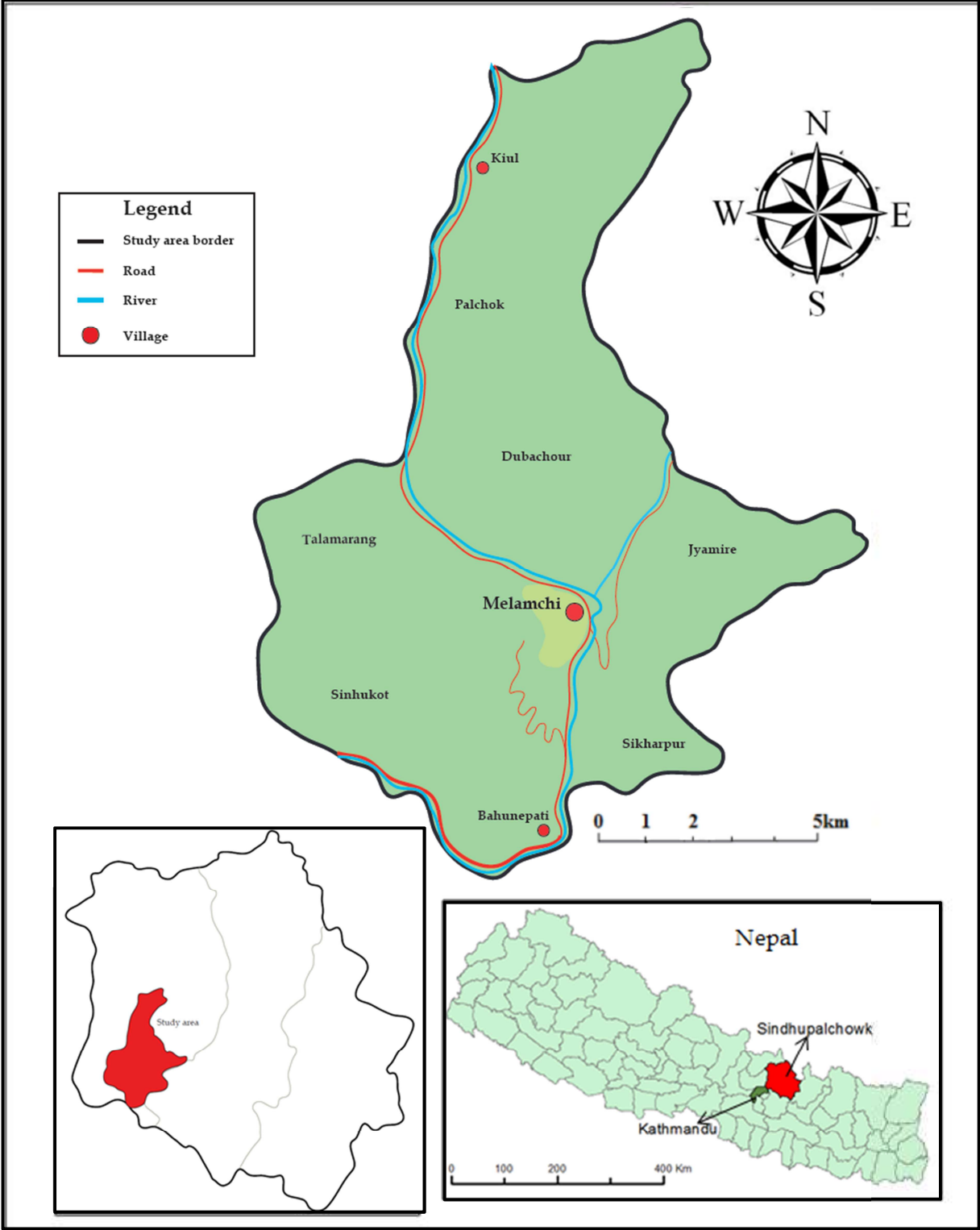
Many villagers had a hard time imagining that the MWSP would be completed as long as someone can make money from hauling it out. Contractors, bureaucrats and government officials (including a former Prime Minister) have all been accused of corruption related to the MWSP. Most people were under the impression that as long as someone sees the opportunity to benefit privately from this multi-million dollar project, it will not be completed. Ending the project would mean a loss of income for many people.

4.3.4 Literacy and education

In 2012 the literacy rate in Melamchi was 62, 8% for the population aged 5 years and above (CBS, 2014). This value is slightly higher than the national average which is 57, 4%. The literacy rate is probably even higher today as most children are enrolled in school. Even though the gap is closing, there is still a clear disparity between male and female literacy rates. 72, 4% of the male population can read and write, compared to only 53, 7% of the female population (ibid). Women are still at disadvantage in the educational sector, and many have little or no education. The disparity in the male-female level of education increases from primary to higher levels, and dropout rates are higher among girls (Rothchild, 2006).

There are both primary and secondary schools in Melamchi (up to 10th grade), but the pupils have to migrate to larger cities like Kathmandu in order to attend higher level education. Many of these students spend most of the year in the cities and visit their parents only during longer school holidays. During my fieldwork it became evident that there is a great difference between the schools in Melamchi. In the private school the students are taught English from first grade, and most of the lectures are held in English. The public school students do not learn English until later on, and only a few hours every week. They have fewer teachers and more students in each class. The international school was very popular, and it was seen as a stepping stone to prepare the student for further studies, good jobs and an opportunity to go

abroad later in life. Most families could not afford the school fee of the private school, creating an obvious division in the village.



Map 1: Maps illustrating the location of the study area on different scales.
Source: Author's elaboration based on Google Maps.

CHAPTER 5: THE FARMING SYSTEM OF MELAMCHI

As mentioned, farming systems are characterized by the interconnectedness of different variables where changes in any variable or unit will lead to changes in the others (Turner and Brush, 1987). First a general outline of the local farming system is presented, and then focus is put on units like household and labour organization, cultivated crops, livestock, land, forests and water resources. The aim of this chapter is to identify the characteristics of the local farming system and the relations among its units. A farming system model and an agricultural calendar will also be presented.

I will not make assumptions on *why* the farming system is the way it is; rather this chapter is mainly descriptive. The descriptions are mainly based on primary data from my fieldwork, but some external references will also be given. Numbers and percentages that are not related to specified references are products of the various quantitative analyses performed in SPSS, where data from the household survey conducted during my fieldwork have been used as input.

5.1 A general overview of the farming system

The importance of agriculture in the study area is evident. Terraced fields have been constructed all around the village, both on flat land in the valley bottom and on the surrounding slopes. Agricultural land is categorized into three different types; *Khet*, the irrigated land which is generally used to grow rice and wheat, *bari* is the un-irrigated land generally used to grow corn, potato and millet, and *pakho* that constitute the less favourable and non-irrigated lands that are mostly used for collection of fodder for livestock, and for planting trees. The farming system of Melamchi is mainly based on traditional skills, methods and crops, and most farmers make little use of external inputs. Ploughing, levelling of land and other field preparation is primarily done with oxen or buffaloes, simple hand tools and human labour. Tractors and other mechanical equipment are rarely seen in Melamchi. The reason for this is mainly the economic expenses, but also because tractors are poorly adapted to the physical environment in this area. Informants reported that tractors would be too big and heavy for the narrow terraced fields and the steep slopes. “*Tractors and big buffaloes are better in the Terai region where the fields are flat, while oxen are more suitable for these*

terraced fields” (Male, 79). Even though mechanical equipment is rarely used in the study area, the usage of chemical fertilizer, pesticides and insecticides has gradually become more extensive.

Livestock is another important unit in the farming system. In addition to being used for transportation, ploughing and other types of heavy farm work, the livestock provide households with assets like milk, eggs and meat. The animal manure is used as natural fertilizer in the fields since it adds nutrients to the soil and thus prevents soil depletion. Animal husbandry relieves farmers of some of the workload and makes them less dependent on chemical fertilizer and commodities from the local market. In return for these favours farmers provide their farm animals with fodder consisting of different types of grains and crops residuals in addition to leaves, herbs and grasses collected from the community owned forests. Bedding for the animals is also collected from the forests. In this way the agro-pastoral system is linked to the forest.

The main crops cultivated in this area are rice, wheat, potato, maize and various types of vegetables. Seasonal variations in temperature and precipitation allow farmers to practice crop rotation where various types of crops are grown in the same fields at different times of the year. The relatively warm climate allows for double cropping of rice in some fields if the water availability is sufficient. This is favourable to the local farmers since rice is the most important crop in this area.

Agriculture is irrefutably dependent on sufficient amounts of water. Irrigation channels are constructed in order to lead water from small streams to the fields, but the amount of water is not constant. Water pipes are also used, but they are often poorly constructed and can lead only small amounts of water. Being a gravity dependent system, water pipes were sometimes seen hanging from tree tops in order to get the right gradient to lead water to the lower-lying fields. Even though some irrigation facilities exist, agriculture in this area is mostly rain-fed.

5.1.1 Agricultural calendar

As mentioned, agricultural activities largely depend on rainfall since irrigation facilities are limited. This, along with temperature variations, means that productive activities in the farming system vary with season. An agricultural calendar (Figure 4) has been sketched up in collaboration with informants in order to give an overview of the distribution of agricultural activities throughout the year.

The peak agricultural seasons comes after periods of rain, and the busiest period for agricultural activities starts in the end of the rainy season (monsoon season) which lasts from June until September. Informants reported that many households suffer a food deficit from August until the beginning of November, before the rice and millet crops are harvested. During this time most people have to buy food from the local market. Insufficient preservation and storage facilities make it difficult for households to store food in order to avoid this period of food-insecurity.

	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
	Chaitra	Baisahk	Jastha	Aashar	Shrawan	Bhadra	Aashoja	Kartik	Mangsir	Push	Magh	Falgun	Chaitra
				RAINY SEASON									
Rice		P		H	P				H				
Wheat		H								P			
Potato									P			H	
Corn		P		H									
Millet					P				H				
Barley		H								P			
Cauliflower								P				H	
Onion								P				H	
Garlic								P				H	
Beans								P				H	
Cucumber			H	P		H							P
Tomato					H		P				H		P
Spinach								P				H	
Cabbage								P				H	
Bitter gourd		H											P
Peas								P				H	
								FOOD DEFICIT					

Figure 4: Agricultural calendar of Melamchi.

Note: P= plant/sow, H=harvest.

I arrived in Melamchi in April, and at that time most of the farmers had started harvesting wheat and barley which they had planted in late November. Wheat is grown in *khet* (irrigated land) and after it has been harvested, these fields are prepared for the transplanting of rice seedlings. The preparation routine starts with ploughing of the fields, before the farmers start constructing dikes to hold water in the paddies. Both manure and chemical fertilizer are used to add nutrients to the fields, and this usually happens shortly after the fields have been ploughed and irrigated. Afterwards, the rice seedlings can finally be transplanted.

Maize is planted in the *bari* (un-irrigated land) in the beginning of April, and is harvested in late June. Millet is planted in mid-July, at the same time as the second rice crop of the season, and harvested in late October. Millet is also grown in *bari* fields. Potato is planted in *bari* in early November, just after various other vegetables like cauliflower, onion, garlic, beans, spinach, cabbage and peas have been planted. The ideal time to harvest these crops is in the

beginning of March. Bitter gourd, tomato and cucumbers are often grown in farmers' home garden. Bitter gourd is planted in early February and harvested in April, while cucumber and tomato are grown twice each year.

There is an inevitable seasonality in the farming system as agricultural activities have lean and peak periods caused by climatic variation. This also affects the labour demand, which is clearly correlated with the agricultural seasons. The farming system of Melamchi has been refined over time in order to adapt to the local environment. Farms are not alike, and there will always be some physical, economic, social and/or cultural differences between them. Still, some common traits can be identified in order to make a simplified description of the functions, units and interrelationships of farms in Melamchi.

5.2 Making a farming system model

Models are simplifications of reality, and system models can thus “provide a simplified description of important system components and their interactions” (Swinton and Black, 2000: 69). In order to provide a comprehensive description of the farming system I have made a farming system model shown in Figure 5. One should note that the model presented is only a general model, not an attempt at explaining each particular farm in the study area. The system's variables have been defined in a broad manner, which some might say would lead to a loss of detail (e.g. the forest variable has not been divided into private and community-owned forest). The simplification in this model has been done intentionally as an overly detailed and complex model probably would work against its intention, which is to enhance the understanding of what is being presented.

There is no clear definition of what should, and should not be included in the farming system model. Accordingly, the farming system can be presented with various boundaries depending on the level of analysis. These boundaries separate the farming system from other neighbouring systems and from the larger community or environment in which it is imbedded (McConnell and Dillon, 1997).

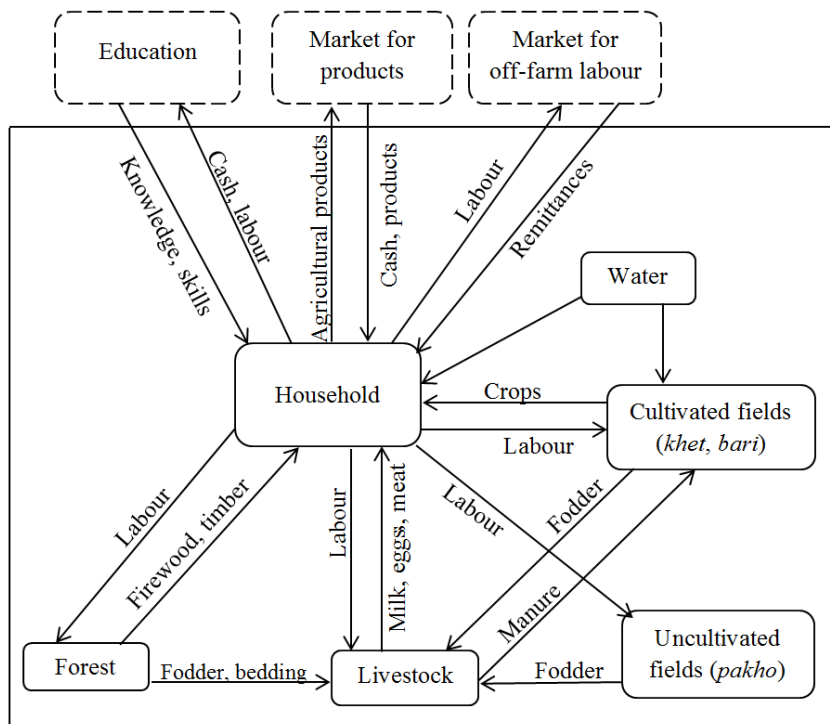


Figure 5: Model of the farming system of Melamchi

In Figure 5 the boundaries are shown as a dark square enclosing the units of the farming system. The units located outside this square (education and market for products and off-farm labour) are shown as boxes with dashed lines. They are not directly part of the system but still have a clear impact on it. These factors have been labelled *parameters* in the description of the historical development of the farming systems approach made by David Norman (2002). The farming system approach has evolved gradually over the last 40 years, and one of the key dimensions of that evolutionary process has been “the way the scope or inclusiveness of a systems perspective has been expanded systematically over time” (Norman, 2002: 2). For any given problem the researcher has to define the ratio of variables to parameters, or in other words “which factors are considered endogenously determined and thus subject of analysis and modification, and which are taken as exogenously determined constants” (ibid). Earlier, it was common for researchers to include only a limited number of variables and regard the other factors that influence the farming system as parameters or constants which were taken for granted and left out of the analysis. Researchers found that the farmer’s production environments were much more heterogeneous than previously thought, this made them realize that the approach was too static and deterministic in its orientation and it did not recognize that farmers operate in a dynamic and often uncertain environment (Norman, 2002: 4-5). As more sophisticated analytic methods developed the ratio of variables to parameters has

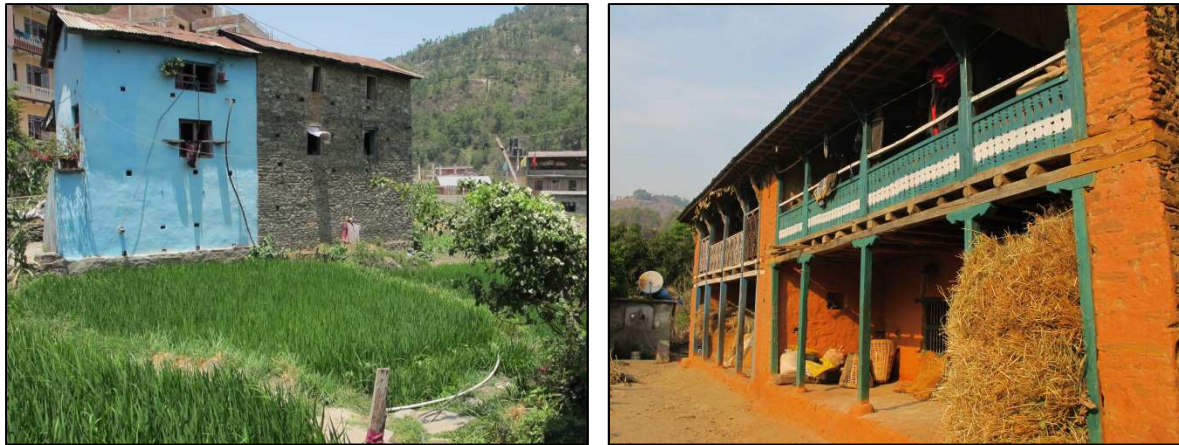
increased and the analytical domain has expanded considerably (Norman, 2002). Three parameters have been included in the model shown in Figure 5 in order to make the reader aware of the possible influence they might have on the farming system, but their importance and effects will not be extensively addressed in this thesis.

Models can serve as tools for structuring our thoughts concerning a topic, but they can also leave room for misunderstanding and uncertainty. Therefore I find it essential to supplement the model with a verbal explanation that provides more detail about each of the system's variables. Written texts can in many cases be more flexible than models as they leave more room for nuances and reflexion. The model will structure the following analysis of the farming system of Melamchi.

5.3 The farming system units

5.3.1 Household, labour and the tradition of *parma*

The household is one of the most fundamental units of farming systems. Anthropologist Robert Netting (1993) argues that the household is so ubiquitous in human society that it is easily taken for granted, but simultaneously the varied forms and activities of households makes it hard to give a common definition. The identity of a household can be recognized in the use of terms like family, house or "those who eat from a common pot" (Netting, 1993). In Melamchi the Nepali term *pariwar* is used to identify the household. In this thesis, the household will be understood as "an economic unit where the members are linked by an economic relationship such as producing together, sharing the money earned or sharing the home" (Grootaert and Marchant, 1991: 17). For example, if a household member migrates to India his journey requires economic support and will thus affect the other household members negatively. On the other hand, the remittances he sends back will have a positive effect on his fellow household members. The household members are directly affected, positively and/or negatively, by this person migrating to India. Households are also characterized as having common property. If two sons inherit their parent's property, the land will most often be divided among them and the original household becomes two separate households.



Picture 3: Two different house styles in Melamchi

Each of the household members are assigned with unique responsibilities and duties related to a specific set of tasks. This might be one of the reasons why households are considered such effective work units (ibid). Household size has an obvious impact on the amount of farm work that can be done and the need for hired labour. The average household size in Melamchi is 5.09. The age and gender of the household members will also affect the household's labour capacity. In addition, gender composition of households is important for the division of labour. Most households consist of both male and female members, and they are assigned different roles with respective work tasks, responsibilities and duties. Factors like level of education, caste and ethnicity, and wealth level might also affect the roles ascribed to household members. The influence of these factors on the gendered division of labour and management will be investigated in Chapter 6.

Migration is another factor with a clear influence on households. Migration is not a new phenomenon, but both the travel distance and length of the stay have increased in recent decades. The reasons why people migrate are multiple, but the opportunity to find paid labour is probably the strongest pull-factor for the Nepali migrants. When a family member migrate the household's labour capacity is reduced. On the upside, households can receive remittances and new ideas from the migrant. The remittances can be used to pay for hired labour, material goods or education for other household members.

Another form of seasonal migration is caused by the increasing number of students from rural areas. Education used to be provided solely for the male population, but the number of girls who are enrolled in school is gradually increasing. Since early 1970s the Nepalese government has initiated several educational initiatives to increase girls' enrolment at primary and secondary levels as well as to ensure that girls stay in school (Rothchild, 2006). One of

the most important projects was the “*Equal Access to Education Project*” which took place from 1971 until 1992. The project was funded by the Nepali government with support from UNESCO, USAID, UNDP and various NGOs (ibid). Still, more girls than boys drop out from school, and this negative tendency increases with educational level. The effects of education on households are varied. Education leads to a loss of labour for the period of time that the student spends in school. This is particularly the case when students have to move away in order to continue their studies. As agriculture is of major importance for at large part of the Nepali population, the summer holiday is in March and April, thus it coincides with a labour demanding time in agricultural production. In most cases students return home and help their parents with the agricultural work, and thus the labour deficit can be reduced. The student needs financial support in order to pay school fees and material, in addition to food and housing. In return, the household receives knowledge which can be of great importance. Several households reported that they let the person with the highest education (often an adult son) deal with budgets, financial decisions and investments. In most cases education is seen as a way of removing oneself from a life as a farmer. Both students and their parents hoped to find off-farm work that could generate money for the household.

The seasonality of the agricultural activities causes an inconsistent labour demand throughout the year. In most of the households that I visited, the labour capacity was not adequate in the peak seasons of agricultural activities. Labour intensive tasks like sowing, harvesting and transplanting of rice seedlings often lead households to call for hired help in order to get the work done within reasonable time. In these cases the tradition of *parma*, or exchange labour, is practiced. *Parma* is a cooperative labour system where exchange of labour between households is done in order to secure a more effective performance of agricultural tasks. One of my key informants told me that *parma* was seen as an important way of helping each other out. “*It is a favour that you know will be repaid. You scratch my back and I’ll scratch yours*” (Male, 18). The system follows an idea of reciprocity, or “give and take”, and there is no monetary value for the exchanged labour in the system. It depends on the honesty and trust of each of the households who maintain it (Cameron, 1995).

If a woman from farm A is sent to transplant rice seedlings in the fields of farm B for one day, farm B is expected to send a woman to do the same kind of work on farm A sometime later. Gender, age and type of work are all key factors in the recruitment of *parma* labourers. Workers are usually served both food and drinks during the workday, but this particular tradition makes it difficult for households of different castes to perform *parma*. High caste

workers should not eat food prepared by people of lower caste. Dalits (low caste) have traditionally been regarded as “untouchable” and thus the food they prepare is “polluted”. This is why the *parma* system is usually performed among households belonging to the same caste.

Parma is a significant form of social organization in the study area. The system reduces the monetary expenses and dependency on available hired labour. Most households could not have afforded to hire enough people without the *parma* system. If there is only one adult in the household, the scope of exchange labour is severely limited (Miller, 2000). If a family needs more help than they can give back, they have to pay for the remaining days of work. I was told that this was one reason why families used to be bigger in previous decades.

The *parma* system is most commonly used during rice transplanting and harvest when a large number of workers are needed for intensive work. These tasks are seen as typical female work, which is why exchange of female workers is most common. During her fieldwork in Western Nepal, Mary Cameron (1995), found that *parma* was used in 75.4 percent of all cases in which work by females was done for others. In contrast, *parma* was absent in men's work arrangements. "They [men] simply say they are doing the work as a favour, with the unspoken assumption that the "favour" will be returned. Women, however, label their labour *parma* and therefore expect a labour return quite soon after"(Cameron, 1995: 234).

5.3.2 Land

Land is one of the primary units of the farming system as it is a prerequisite for agricultural activities. Farm land is broadly categorized as cultivated and uncultivated land. As mentioned, cultivated land is further categorized as *khet* (irrigated land), *bari* (un-irrigated land) and *pakho* (pastures and outlying areas). The majority of the households have *khet*, *bari* and *pakho* land, but the distribution of land among households is unequal. Generally, households own small shares of land. The average land size in Melamchi is 8.76 *ropani*⁷, but the survey reported answers which varied from 1 *ropani* to 90 *ropani*. There is social prestige connected to the amount of land owned, and people owning a lot of land are seen as wealthy in the local community. A correlation analysis based on the household survey showed a significant correlation between wealth level and amount of land owned ($p < 0.05$). This correlation was

⁷ 20 *ropani* \approx 1 hectare (ha). (8.76 *ropani* \approx 0.438 ha)

not surprising as the households' wealth level were determined partly from the amount of land owned.

The availability of land for cultivation is generally not a problem in the study area. Rather, 22% of my informants reported that they had abandoned fields which previously used to be cultivated. Both observations and interviews with farmers confirmed that pieces of land had been abandoned in the study area, most commonly the *pakho* areas. This was especially significant if the household did not own livestock, or when the plots were located far away from the settlement. Another reason given for abandoning land was lack of labour which had forced households to leave part of their land unproductive. Several informants reported that they had sold plots of land to afford education for their children, or to finance the starting up of new businesses. Some farmers also rent out parts of their land to other villagers. I was told that renting out land has become more common as the importance of agricultural work is decreasing in the study area. In return for renting out land people get money and/or a share of the crops cultivated.

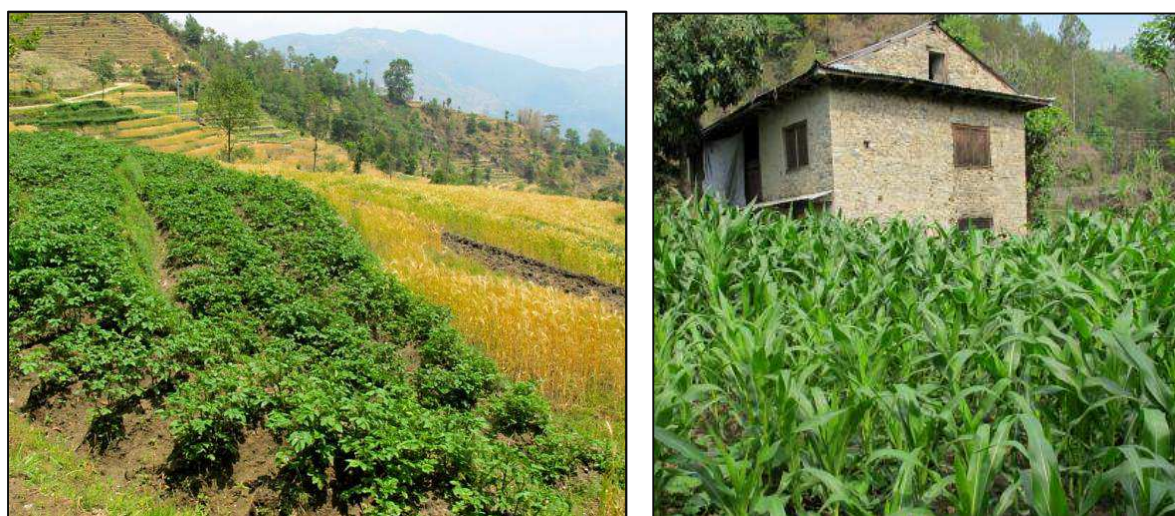
Land is primarily owned by men following a male line of inheritance where property is passed from father to his sons through generations, this practice is named patrilineality. Primogeniture, where the eldest son inherits the whole property, is not common in Nepal. Instead people in this area perform shared inheritance where each person gets a piece of the original property. The splitting up of larger properties results in a gradual reduction of land size. For years, women were not allowed to inherit property at all. "Although inheritance laws have since been reformed, in practice, many women are still denied access to property that is rightfully theirs" (Subedi, 2010: 4). Instead, women have entitlement to land through their male counterparts. This makes a difficult situation for many women, especially if they are unmarried, divorced or widowed. Land ownership is further connected to access to financial services and credit, which means women are restricted from purchasing land without male consent (Subedi, 2010).

Whenever I asked informants about land ownership issues they seemed surprised, and most of them did not see any alternatives to the current arrangements. *"If daughters were to inherit property it would only be transferred to her husband when she got married. It makes no sense"* (Female, 47). Unmarried women have a hard time accessing financial services and getting loans, thus most young girls feel bound to get married. These challenges were confirmed in an interview with a Dalit woman whose husband had just passed away. She and

her daughter lived alone on the farm, and the daughter had been taken out of school in order to help her mother with the farm work. *"If she does not get married, we have no future"* (Female 51).

5.3.3 Cultivated crops

Farmers usually grow most of the crops and varieties mentioned in the agricultural calendar as it seems to provide a natural progression of farm work throughout the year. A high level of crop diversity may give farmers some measure of protection against crop failure due to drought, disease, insect infestation and other adverse circumstances (Schroeder, 1985). 63 % of my informants had cultivated new crops in the past ten years. The new crops had been introduced to the farmers by various organizations visiting the area, returning migrants or travellers who shared their experiences from other areas. Various NGOs had arranged information meetings about the cultivation of different crops and their benefits in Melamchi. The farmers were usually given seeds in order to try the new crop themselves. By attending information meetings and trying new types of crops, farmers continually expand their stock of agricultural knowledge.



Picture 4: Potato and wheat fields (left), and maize crops close to homestead (right)

In the last 10 years the local farmers have started to cultivate onion, garlic, pumpkins, tomatoes, potatoes, and other vegetables like beans and cucumber. Some of my informants were also planning to grow tomatoes in small greenhouses. Potato has become one of the most important yields even though it was introduced to this area less than ten years ago. Potatoes are both adaptable and nutritious, and can be cultivated in most growing conditions.

This is much appreciated in a region characterized by great climatic variations. The household survey indicated that wealthier households have a higher propensity to try new crops than households with middle or low wealth ranking ($p>0.05$). It can thus be argued that wealthier households are more innovative, in contrast to the proverb “necessity is the mother of invention”. It seems natural that those with more money will be less hesitant to try new things in cases where the success of implementing a new crop or technique cannot be ensured. Wealthier farmers are most likely more innovative because they can afford the extra equipment and necessary inputs needed, and are less dependent on the immediate success of the innovation.

The cereal crops grown in this area were mainly grown for household's self-consumption. Farming is still the most important occupation in the study area, but now it is often complemented with some of the household members doing other types of work. Even in the cases where my informants clearly stated that the importance of farming had been reduced in their household and that most land was rented out to other families, small plots of land were still used for subsistence production. In this way the family was not totally dependent on buying food from the local market. Even though the importance of agriculture was said to be declining, the correlation between amount of land owned and wealth level mentioned earlier indicates that agriculture is still vital in this area and that it creates prosperity for those who own a lot of land.

5.3.4 Livestock

There are various reasons why livestock is an essential unit of the farming system, and some of them have been mentioned already. The domesticated animals provide households with milk, eggs and meat, and they are used for transport, ploughing and other heavy farm work. Some farmers keep livestock for economic purposes like selling milk, cheese and meat, while others breed animals for sale. One of the informants owned a milk tank that local farmers could bring milk to and get some money in return. The milk was preserved in the tank before it was sold to a dairy located somewhere closer to Kathmandu.

The most common livestock in the study area are cows, oxen, buffalo, goats and poultry. A total of 85.2 % of the households interviewed owns one or more of these. Pigs have become more common in this area, and a small pig farm has recently been established right outside *Melamchi bazaar*. The distribution of livestock in the households interviewed is presented in

Table 1. The table shows that buffaloes and goats are the most popular livestock in the study area. Some households reported that they shared their buffalo or ox with another family. Each of the two families cares for only one animal, but in time of ploughing they use the other family's ox or buffalo in addition to their own. Most of the animals are allowed to graze outside during summer, but some informants reported that they prefer stall-feeding. This makes it easier to collect manure, and they do not have to herd the animals.

Table 1: Keeping of livestock in interviewed households (n=54).

Type	No. of households	Percent ⁸
Buffalo	36	66.7
Cow	12	22.2
Ox	8	14.8
Goat	30	55.6
Chicken	12	22.2

Cows have a special religious importance in Hinduism. They are not used for agricultural work like ploughing, and the meat is not eaten by Hindus. It is common not to eat meat at all because of religious beliefs, and many households are practically vegetarian since meat is too expensive for everyday consumption. Cows are only used for production of milk and manure, and that might be the reason why only 22.2 % of the households own a cow. This is a clear example of how culture has the ability to influence the farming system. Voices has been raised for inclusion of culture within development debates to get a fuller understanding of people's behaviour and beliefs (Skelton, 1997, Tucker, 1996). The same arguments apply for other types of studies as well because leaving culture out of analysis might lead to misunderstandings and incorrect representations (Tucker, 1996).

The farming system of Melamchi is a combination of crop cultivation and animal husbandry that is typical in many parts of the Himalaya (Aase et al., 2009). In order to perform a sustainable agricultural practice it is vital to replace soil nutrients in the agricultural fields, as nutrients are removed every time crops are harvested. This has traditionally been done by fertilizing the soil with animal manure mixed with crop residuals.

⁸ The reason why the value has exceeded 100% is that one household can own more than one variety of livestock.

The relationship between cultivation and livestock rearing used to be so strong that the number of cultivated fields had to be proportional to the number of animals in the farming system. This relationship has been weakened after the introduction of chemical fertilizer, and many farms have gradually reduced the number of farm animals. Still, most farmers are reliant on animal manure and many of my informants stated that they used chemical fertilizer in addition to manure. This might be because the price of chemical fertilizer is relatively high compared to the economic dividend from agriculture. As off-farm work has become more



common, households' monetary assets are generally growing. Many of the assets provided by the animals can now be bought from the local market. Combining farming with other kinds of work is easier if there are no livestock to care for. The livestock demand daily care which most migrants and off-farm workers cannot give them, and this is an important reason why many households have decided to sell their animals.

Picture 5: Buffalo kept close to the homestead.

5.3.5 Forest

The forest in Melamchi is divided into community forest and private forest. The private forest is mostly consisting of the trees that individual farmers have planted near the edges of the cultivated fields, while the vast forested areas around the settlements is the community forest. Forest is covering large parts of the valley sides in areas where villagers have not cut them down to make space for field expansion, and it is an important variable in the local farming system.

Forest resources are used in various ways. As mentioned animals are fed different types of straws and seasonal grass that is collected from the forests that ensures them a varied diet and necessary nutrients. In addition, the dry leaves used as animal fodder is later mixed with manure and spread out in the fields. This is another reason why the forest is an important

variable in the farming system, linked to both the agricultural and pastoral system. The most obvious usage is the cutting down trees to make timber that is used as construction materials for houses and animal sheds. A private company has started a small business selling local timber to other areas of Sindhupalchowk and to Kathmandu. In addition, households use firewood daily for both cooking and heating.

Trees and forest have a cultural importance too. Various herbs and plants collected from the forest are used for both cooking and medicine. During one of my interviews the conversation was suddenly interrupted when the informant's neighbour suddenly started shouting something from across the field. My interpreter told me that an old lady from a nearby village had just passed away, and the man we were interviewing was told to go there as soon as possible. "*And he has to bring a tree*", my interpreter said. I did not understand the reason for this, but he explained that the family and friends of the person that had passed away had to bring trees for the funeral because the dead person was cremated soon after his/her death. These trees are collected from the community forest. Other ceremonies and religious festivals also require some trees to be cut down in order to make bonfires or for cooking.

Members of the local community can collect fodder and bedding for the animals from these forests as they please. In cases where someone wants to cut down a tree for construction work, or for wedding or funeral ceremonies, a certain rate for this is set in consultation with the forest user group (FUG). The cost of cutting down a tree ranges from 200-500 Nepali Rupees⁹ (NRP) depending on the size of the tree.

5.3.6 Water resources

The agricultural production in Melamchi is mostly rain-fed since irrigation facilities are limited. The peak seasons for agriculture follow the periods with sufficient amounts of water, constituting the importance of water for agricultural production. Even though water seems easily accessible having the *Melamchi Khola* and *Indrawati Khola* located so close to the settlement and the fields, few irrigation facilities are supported by the two rivers. 63 % of the farmers interviewed mentioned water insufficiency to be one of the biggest limitations for (increasing) agricultural production in this area (Figure 6).

⁹ 100 Nepali Rupees (NPR) = 7.21 Norwegian Kroner (NOK) = 0.98 U.S. Dollar (USD)
[Exchange rate of May 15th, 2015]

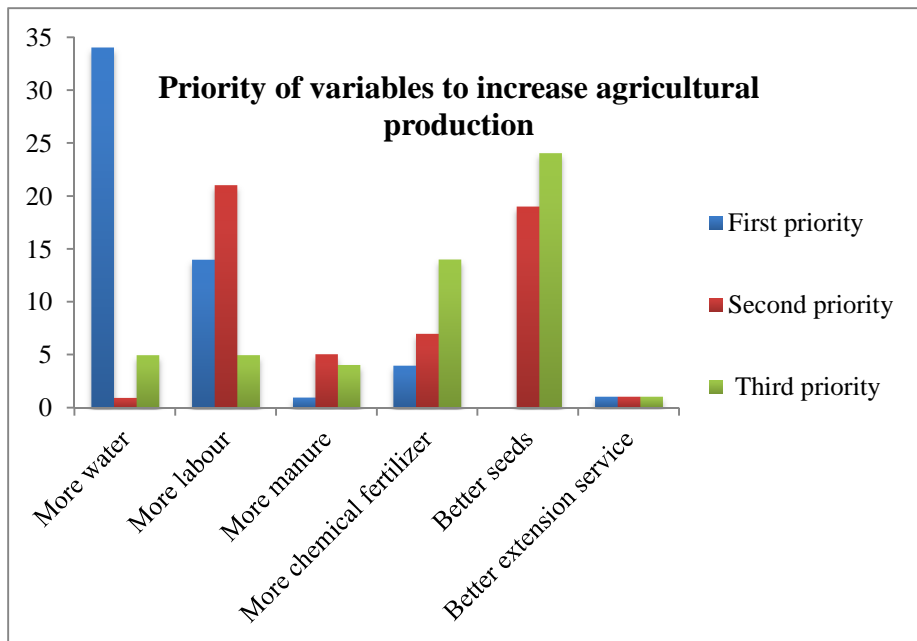


Figure 6: Priority of variables to increase agricultural production.
Note: The y-axis represents the number of respondents (n=54).

Irrigation systems can facilitate cultivation in areas that would otherwise remain unproductive, but since most irrigation channels are based on a gravity principle it is difficult to lead water from the lower-lying rivers to the fields. Some of the smaller streams are used as basis for irrigation channels, but only a few plots of *khet* can be irrigated with the water from these. Wells and pipelines are also used for drinking water and irrigation, but they are few in number and in times of little rain they often dry up. The lack of water is especially evident in the time prior to the rainy season.

The *Melamchi Khola* is an important fishing river, and some farmers and outside investors have started up fish farms on various sites along the river. The price of the fish is much higher than most people in the local area can afford, and the fish is usually sold to expensive restaurants in Kathmandu. Trout in particular has become very popular in the recent years. Both the local fishermen and the commercial fish farms are likely to be affected by the Melamchi Water Supply Project (MWSP), but it is impossible to predict how strong the impact will be. Changes in the water availability will ultimately influence the whole community. There is no doubt that the rivers are important to the local community, and a drastic reduction of the water level can affect people's usage of the river and its resources. Even though the MWSP was initiated 16 years ago, most informants did not think it would be completed at all. When or *if*, the project is completed it might initiate a conflict between

Melamchi and Kathmandu on the water resources and distribution as large shares of the water in the river will be redirected to the capital.

Even though the farmers make little use of the river for irrigation today, plans have been made in order to utilize this resource more in the future. These plans will not become reality if the MWSP finishes and the water levels are dramatically reduced. In addition, the fish stock is likely to be reduced, and the river's appeal as a recreation area for both children and adults will diminish. Another problem is that many locals make money from the completion of the MWSP being delayed. The project ensures both jobs, and more importantly, compensations for some of the local residents. This shows some of the reasons why locals have not stressed the completion of the Melamchi Water Supply Project.

5.4 Summing up

From this description of the local farming system in Melamchi it is evident that the system's units are interlinked in complex ways. The utility of one unit's resources depends on the availability of other units' resources and how these are distributed. Both resources and practices vary among households, which is why the households have been organized in order to manage the farms and available resources in the best possible manner. This leads us to the subsequent analysis and discussion where focus is put on gender roles and relations within households and their influence on the farming system.

CHAPTER 6: A FEMINIZATION OF AGRICULTURE?

Many developing countries are characterized by a large share of females participating in agricultural work. Women have always been involved in agriculture, but the scale and range of their participation and responsibilities have increased in recent years. This increased importance has been termed "the feminization of agriculture", and is supported by various scholars (e.g. Jiggins, 1986, Jiggins, 1998, Upadhyay, 2005, Lastarria-Cornhiel, 2006, Bhadra and Shah, 2007). The feminization of agriculture in various developing countries has been explained in numerous ways, but increased male out-migration and the start-up of new businesses that are mainly driven by men are often mentioned as important factors.

In an article by Brauw et.al (2008), two different types of feminization are presented, namely, a feminization of labour and a managerial feminization. These two types will serve as an analytical framework in order to "measure" the feminization of agriculture in Melamchi. First, the gendered division of agricultural activities will be identified to detect whether or not a feminization of labour has taken place in the study area. Identifying the gender specificity of tasks might also enhance the understanding of the local gender roles, and explain why the gendered division of certain tasks has remained relatively consistent in time. The second section examines the feminization of management; firstly with a description of how managerial responsibilities are divided between males and females, and then by presenting some of the justifications for this division. Some factors that might influence the two types of feminization of agriculture in the study area will also be identified. These factors include education and agricultural training, ethnicity and caste, and women's access to financial services. Lastly, I want to discuss how the authority of the decision-maker legitimized in households in Melamchi. Weber's three types of legitimate domination will be tested as a mode of explanation, and its relevance of in the context of my research will be discussed.

6.1 Gender division of agricultural activities: a feminization of labour?

As an outsider, one of the first things I noticed after arriving in Melamchi was how influential gender was on the division of agricultural tasks in the study area. The gendered labour division appeared as something natural and inevitable. Cecilia Bergstedt (2012) describes a similar situation from her fieldwork conducted in a rural village in Vietnam. She noticed that "the ways in which men and women are engaged in farm labour were highly significant parts

of the practices that shaped individuals into decent and respectable female or male persons" (Bergstedt, 2012: 119). Assigning the different tasks with feminine or masculine qualities might be one reason why the gendered division of labour in the study area is relatively undisputed. Subedi (2010) writes that the gendered division of agricultural work exists in both family labour and the *parma* (exchange labour) system in Nepal, but this division is in a process of change. Women are taking on more agricultural work than before and have gradually become the most important labour force in agriculture. This coincides with the description of labour feminization presented by Brauw et.al (2008) as a situation where women perform an increasing share of on-farm work within the household. In order to ascertain whether Melamchi is experiencing a feminization of labour, the division of tasks between male and female household members was identified. The informants participating in the household survey were asked whether it is mainly men or women who perform various agricultural tasks, or if tasks are performed by both men and women jointly. The results are summarized in Table 2.

Some tasks are clearly gendered as either men or women perform them almost exclusively. The most extreme example is ploughing, which is a strictly male activity. 53 of the 54 informants answered that this was a male task, which made my interpreter embarrassed to continue asking informants this question. "*It feels strange asking them about this when I already know what they are going to answer*" (Interpreter, 19). Most households use oxen for ploughing, while the single informant who answered "both" lived in a household who owned a tractor which women could also use to plough the fields. In addition to ploughing, males are usually responsible for the threshing of rice, wheat and millet, and the levelling of land. 89 % of the respondents described levelling of land as a solely male task. Sowing and winnowing, on the other hand, are almost exclusively done by women. The remaining activities are usually done by men and women equally, or by none. The column on the far right in Table 2 shows the total number of respondents. The reason why the value is not 54 in all rows is that a few activities were not conducted at all in some households. For example, if a household did not own any livestock they would not have to do any herding or milking. As the values in the rest of the table are shown as a percentage of the number of respondents, a varying n-value should not have any major effect on these results. 52 % of the households owning livestock reported that both men and women milked the animals. One informant who owned a buffalo told me that both men and women did the milking so that the buffalo would not be accustomed to either the male or female "touch". "*The buffalo will not give milk to the wife if*

it is used to the husband's way of milking. This can cause trouble if the husband is sick or out of town" (Male, 55). Because of this, the task is purposively shared between men and women.

Table 2: Gendered division of agricultural tasks

Type of work	Men	Women	Both	Total (n=)
Ploughing	98	-	2	54
Irrigating	43	22	35	54
Weeding	13	44	43	54
Harvesting	22	13	65	54
Sowing	-	98	2	54
Herding animals	17	30	53	30
Levelling land	89	7	4	54
Collecting fodder	5	56	40	43
Collecting fuelwood	9	35	33	43
Milking	16	32	52	44
Threshing	69	19	13	54
Manure fields	30	32	39	54
Applying chemical fertilizer	43	20	37	54
Winnowing	3	94	3	33

Source: Household survey, 2014

Note: Values in percentage of number of respondents.

As described in Chapter 5, both firewood and fodder collected from the forest are important assets in the farming system. 56 % of the households reported that women alone were in charge of collecting fodder, about one third of the respondents stated that men and women shared this task, and only 5 % answered that this was the men's responsibility. The collection of firewood is also mainly done by women alone (35 %) or by both men and women (33 %). Eleven informants stated that they did no longer collect firewood because they had started using gas stoves for cooking. While one informant had a son who owned the local furniture shop, and he provided the household with firewood from the residual materials.



Picture 6: Gendered division of tasks. Men ploughing and women transplanting rice

After describing the gendered division of agricultural activities, informants were asked to mention activities that men or women are restricted from doing. The answers were surprisingly uniform. When asked which activities men could not do, most people replied “none”. *“Men can do any type of work as long as they want to, and have time to do it”* (Male, 41). In most cases, however, informants mentioned some activities that men avoided or preferred not to do. The most common examples were sowing, winnowing and cooking. When informants were asked to explain why men did not perform these tasks they often gave replies similar to this one: *“That is just the way we do things here. It is our parampara (tradition)”* (Female, 30). Others mentioned lack of knowledge, skills and training as important reasons why these tasks are assigned to women. When asked why men did not transplant rice one of the informants answered: *“men find this kind of work very irritating. Women enjoy talking to each other all day, while men only get annoyed by this”* (Male, 49). Some also insisted that men would get soar backs from transplanting rice, while women would not be bothered as they were already accustomed to this kind of work. One interview with a male informant was disrupted by two women who clearly disagreed with the assumption that sowing was easy work. However, they did admit that working side by side with other women was something they enjoyed. During the transplanting of rice women line up and work from one end of the field to the other. This arrangement easily allows the women to have conversations with each other during work hours, which make the work less dreary.

The informants listed several agricultural activities that women cannot perform, including ploughing, roof construction, levelling land and preparing the fields for planting of crops.

Many informants seemed surprised when I asked them to explain the female restriction from doing certain tasks. Various reasons why these activities were seen as male domain were presented, but tradition and cultural beliefs were mentioned by most informants and seemed to be important factors. In addition to this, some were concerned about practical issues like women's clothing not being suitable for particular activities. *"I would like to see you try ploughing the fields in the clothes that you are wearing"* (Male, 49). This reply was given by one of the informants a day I was wearing an ankle length skirt. The remark was followed by joint laughter from the spectators who had gathered around us during the interview. It seemed like most villagers had trouble just imagining a woman ploughing the fields. Several informants blamed the restriction of certain agricultural activities on women's lacking physical abilities, and stated that men should be responsible for the physically demanding farm work since they are generally stronger than women. *"Ploughing is heavy work so the men have to do it. If we had tractors, women could also do the ploughing"* (Female, 70). This explanation has been questioned by Bradley (1989), who cites several incidents where women have ploughed the fields without tractors. *"Whether inadequate physique really stops women ploughing is debatable"* (Bradley, 1989: 80). She presents several examples, varying both in time and space, which prove that ploughing is within the female capacity.

It seemed like *parampara* (tradition) was the most influential factor for preventing people from crossing the gendered division of work tasks. Tradition and beliefs related to gendered division of labour are further constituted through various cultural myths describing occasions where women have defied the local norms. One story that I was told several times describe the Seti River's search for her elder sister, the Kali River, who had run away. As the Seti River was rushing through the Pokhara valley looking for her sister, she noticed a group of women ploughing the fields. *"Surprised and also embarrassed to see women toiling instead of their male counterparts, she plunged into a deep gorge to avert her eyes from this shameful sight"* (Vaidya, 1983: 14). Unfortunately, the Seti River never caught up with her sister. In this story the women defying the traditional division of labour are blamed for the creation of the deep gorge that makes it practically impossible to use the Seti River for irrigational purposes on the Pokhara plain. Several informants jokingly told me that this might happen with the *Melamchi Khola* too, if the women in this area were allowed to plough the fields. This, and other myths like it, clearly depicts the cultural grounding of the gendered specificity of tasks.

Informants usually agreed that it was beneficial for everyone if each household member concentrated on what they did best, and that this was achieved when men and women acted in accordance with their “natural” capacities. One informant did not think that the restrictions mentioned were negative for women at all, rather she saw it as something that relieved them of some of their workload: *“Men are cheaters. If women were allowed to do all kinds of tasks, men would choose to do nothing at all”* (Female, 40). Another informant stated that women being restricted from ploughing might even be a sign of affection from the men, *“maybe it is just the men's way of showing us love”* (Female, 44). I did not get the impression that women *wanted* to perform the tasks they were restricted from doing, and many described the “male tasks” as both strenuous and dirty. At first glance one might think that the restrictions are forced upon women without their consent, but it appeared to be a clear consensus between men and women on the division of labour in the study area. The gendered division of agricultural tasks might not have any negative impact in itself, but as the different activities are assigned specific wage rates women are often left with the least profitable types of work when they are hired as waged labour.

6.1.1 Gender wage difference

The Nepalese government has determined a minimum wage rate of 150 rupees per day for agricultural labour, and promises equal rights to employment and equal pay for similar work, regardless of gender (Mahat, 2003, Gazette, 2008, Subedi, 2010). Unfortunately, this is rarely seen in practice. Even though men and women perform many of the same activities in agriculture, their wage rate is often not the same. This section presents the empirical findings of gendered wage variation among agricultural workers in the study area.

Each settlement in the study area agrees on a local wage rate, and any deviation from this agreement would lead to a reaction from the community. In general, women’s wages are lower relative to men’s when they are hired as agricultural labourers. According to informants, the wage variation between males and females is largely due to the fact that men and women are hired to do different types of work. *“Sowing is easier work than ploughing. If men and women do the same work, they will get equal payment. The women are not exploited; it is just that men deserve higher wages for the type of work that they do”* (Male, 55). Gendered variations in work effort and time spent working was rarely mentioned by informants, but many argued that “men’s work” require a higher level of strength and skills relative to “women’s work”. Kelkar (2007) writes about the wage inequality between male

and female agricultural workers in India. Even though women are seen as an important labour force, their payment does not match the men's wage rate. "The wage differentials between female and male agricultural workers are based on a pre-assumed gender character. Employers and contractors simply offer lower wages to women, regardless of their performance on the job"(Kelkar, 2007: 5). The belief that women are less productive than men is prevalent in the study area, even though some informants strongly disagreed with this perception: *"People think that women are weaker than men, so they pay them less. In reality most women work much harder than their husbands, so this arrangement is not fair"* (Female, 40). Domestic work is rarely encompassed in informants' definition of "work", but when asked specifically to include it, most informants then agree that women spend more hours every day working relative to men. *"Women have to get up at 4 or 5am and work continuously until the dinner is finished at around 7pm every night"* (Male, 28).

When I asked an informant why he did not pay men and women equally, he replied that the gender wage discrimination had become a national standard which he found it difficult to oppose. *"I want to give them the same amount, but male workers demand to get a higher wage than females. They think their work is more valuable than the work done by women"* (Male, 76). The wage variation between the sexes means that women have to work longer hours to get the same payment as their male counterparts. Cameron(1995) argues that employers profit from hiring women rather than men to do the time-consuming work, while men will only get hired to do the kind of work that women are restricted from, like ploughing and digging irrigation channels. As long as the gendered division of labour prevents women from getting hired to do "men's work", women are confined to take on types of work that are seen as suitable for their "female characteristics" and thus they continue to receive lower wages than men.

The low wages for women relative to men is not limited to farm work. In general, men's off-farm wages are also higher than women's, meaning that households profit more from supporting males to get an off-farm job than females. Men are also in advantage of being more mobile than women, which means that barriers to off-farm entry are easier to overcome as a male. This might also reduce the incentives for girls to strive for higher education and off-farm work, thus they are more likely to continue working as agricultural labourers. This trend is further strengthened if the demand for female workers in agriculture remains high. Evidently, the higher wages in the off-farm labour markets and looser barriers to off-farm

entry for men relative to women might increase the proportion of farm-work done by women and reinforce the feminization of labour in rural areas in years to come.

6.1.2 Flexibility in the gendered division of agricultural activities

Gendered division of labour is prevalent in many parts of the world, but it is not a homogenous and constant arrangement. The understanding of male and female work varies both in time and space (and even within a specific time and place). This makes it possible to conclude that it is not the actual requirements of the work that determines whether it is best suited for either men or women (Bergstedt, 2012). Even though this might be the case, the gendered division of tasks in the study area seemed both rigid and unquestionable. This conviction was strengthened as similar answers and justifications concerning gender division of labour were given in most interviews. However, I soon realized that exceptions *did* occur, and that transgression of the basic labour division happened occasionally. In other words, women could perform “male tasks” and men could sometimes be seen doing “female tasks”, even though this was seldom mentioned during interviews. Rather, the exceptions were often revealed through observation and informal conversations with locals. One example unveiled itself as I was walking in the village with a key informant, Gagan (male, 28), when we suddenly met his aunt preparing her the fields for the transplanting of rice.

Gunnhild: *I do not understand. Didn't you just tell me that women do not prepare the fields?*

Gagan: *Yes, but her husband is not here. He works for a travel agency in Kathmandu so of course she has to do it.*

This is a clear example of what has already been discussed in the methodology chapter. Interviews alone would not be sufficient to detect the situation I had just witnessed, as exceptions like this one was generally not mentioned during interviews. Fieldwork and observation thus has the ability to complement the information produced during interviews and ensures a more truthful representation of situation studied. At first this incident surprised me, but in the course of my stay I realized that crossing the gendered labour division was accepted if the circumstances in a household had been temporarily altered. This could be due to unforeseen matters like sickness or the shorter or longer absence of household members of working age. For example, during the civil war women did the ploughing in the absence of men in the Baglung district in Western Nepal. The conflict increased women's workload as the men left their household to fight. "Consequently, women were forced to take on

responsibilities for the entire household and farm, including roles that were traditionally considered male roles such as plowing[sic] and performing religious ceremonies" (Subedi, 2010: 102). This incident was often talked about among informants, and seemed to have made quite an impression even though it happened in another part of the country. Many men were killed or disappeared during the conflict, thus their wives, sisters and daughters had to permanently take over the "male tasks". The exception of this was the ploughing of fields, which went back to being an exclusively male task as soon as the first men returned to the area.

Labour scarcity is the second most important obstacle to growth in agricultural production in the study area (see Figure 6). It has the potential to cause situations where household members are "forced" to cross the gendered division of labour, as during the civil war. Labour scarcity increase when people move away from agricultural work either physically by migration, or by shifting their occupation to other sectors. Education is another factor that that might "pull" people away from the agricultural sector. Parents and teachers promote education for the children and encourage them to strive for jobs in other sectors than agriculture. In Nepal, education has traditionally been more accessible for males, which might be one reason why it is mainly men who are shifting their occupation to off-farm work. As the enrolment of girls in school increases, this bias may be reduced. Educational sessions related to agricultural production are arranged occasionally in the study area, and might further strengthen the feminization of agriculture. *"The one that has most interest in agriculture should attend the training sessions, and the one who has most training should be in charge of the agricultural decisions"* (Male, 71). As women's importance as agricultural labourers increase, they are more likely to attend agricultural training sessions, which in turn might further increase their importance in managerial matters concerning agricultural production. Even though, some activities, like ploughing and preparing the fields, are still defined as men's responsibility. This means that any viable household must consist of both men and women in order to perform all types of agricultural work without hiring outside labour. As long as some tasks are defined as exclusively male responsibility no farms can operate without any male labourers and a complete feminization of labour cannot take place.

6.2 Gender and decision-making: A feminization of management?

According to Brauw et.al (2008) feminization of management occurs in one of two ways; either when women increasingly become the primary decision-maker on the farm, or when they gain greater access to agricultural income. In the previous section, the feminization of labour was investigated and some factors indicated that a feminization of labour has been taking place in Melamchi as women become the main agricultural labourers. The term *feminization* of agriculture implies a strengthening of women's position, or empowerment, as women get more influence and responsibility in the household and on the farm. But if this process is characterized solely by an increase of women's workload and not the managerial responsibilities of the farm, the feminization of agriculture is not necessarily a positive development for the local women. This kind of feminization cannot be described as empowerment but exploitation of women. Some scholars argue that this has been the unfortunate truth in most cases where an alleged feminization of agriculture has taken place (de Brauw et al., 2008, Song et al., 2006). Even though it is said that women spend more time in cultivation and food production than men, their importance is often not recognised, and they are neglected in the decision-making processes (Song et al., 2006). Building on a hypothesis presented by Acharya and Bennett (1981), this section will investigate whether women's high rate of participation in agricultural and domestic labour is reflected in a proportionately high input in household decision-making concerning farm management and the distribution of the household income. Gender disparity in decision-making is a common phenomenon in many developing countries. Even though decision-making traditionally has been seen as male domain, the gender disparity varies according to ethnicity, culture and geographic location (Devkota et al., 1999).

Seven key activities related to agricultural production were identified in the household survey. The informants were asked whether it is mainly men or women who are responsible for any decisions concerning these activities, or if the decisions are shared among genders. The responses are presented in Table 3.

Table 3: Gendered division of managerial decisions

Who decides...?	Men	Women	Both
Which cereals to grow?	26	43	32
Which vegetables to grow?	11	50	39
Which livestock to keep?	20	30	50
Which cash crops to grow?	24	24	52
Amount of chemical fertilizer?	52	17	32
How to spend the household income?	67	2	32
Hiring of outside labour?	41	15	44

Source: Field survey, 2014.

Note: Values represented as percentage of total number of respondents (n=54).

Some decisions are made exclusively by either men or women, but the percentage of decisions that are made jointly are relatively high in all rows. This was also made clear by informants who often stated that decisions were usually made after both male and female household members had discussed the case in question. *“The one who is most interested in the activity makes decisions related to it, but all major decisions should be discussed among the household members”* (Male, 71). Thus, men and women seemed to have an equal saying in decision-making. 52 % of the informants answered that both men and women make decisions related to the choice of cash crops, and 50 % of the decisions concerning which livestock to keep.

Women were in charge of decisions about which vegetables to grow in half of the households interviewed. This high value is probably related to the fact that women are usually responsible for preparing food, and should therefore decide which ingredients to grow. Men alone are responsible for decisions about the cultivation of vegetables in only 11 % of the reported cases. Women are also more often in charge of decisions related to the cultivation of cereals (43 %). Men make these decisions in 26 % of the households, while men and women decide this together in 32 % of the households interviewed. Women are in charge of decisions about livestock in 30 % of the cases, slightly more often than men, who are in charge in 20 % of the households.

Men are responsible for determining the amount of chemical fertilizer that should be used in 52 % of the households. Only 17 % of the informants stated that this was usually women’s

responsibility, while 32 % answered that both men and women were in charge of this decision. The high percentage of male responsibility may be due to the relatively higher level of education among males in the study area. Being able to read and having basic numeracy skills are prerequisites for managing chemical fertilizer. *"I discuss all decisions with my wife, but since she cannot read I deal with the usage of chemical fertilizer and monetary matters on my own"* (Male, 76).

The greatest disparity between men and women in decision-making was revealed when I asked about decisions concerning how to spend the household income. In 67 % of the households, informants reported that men alone were in charge of economic decisions. Only one informant reported that women were in charge of this in her household, and that was because her husband had recently passed away. 32 % answered that both men and women decided this together. My informant Nashita (female, 40) was an outspoken woman who lived with her husband and their two sons. Nashita repeatedly told me that she was a "proud communist woman" and that she had no problem performing any agricultural activities if she wanted to. *"I do not care about this bullshit. Men are always telling us what to do and not to do"*. Even though she said this in a jokingly manner, I had no problem understanding that she really meant what she said. Nashita told me that her husband was a lazy man with little interest in agriculture who had left her responsible for both agricultural work and decisions related to farm management. Nevertheless, when I asked her if she was in charge of the allocation of the household income she had to admit that this was her husband's responsibility. In most societies, behaving in contradiction with established norms and rules is followed by social sanctions. During her fieldworks in Egypt and Oman, Unni Wikan (1975) found that whenever men or women acted in a way that defied the roles as husbands or wives, a reaction occurred. If an Omani husband was unable to provide financially for his wife, thus defying his role as a husband, the wife's counterstrategy was to sanction her husband by embarrassing him in front of his family. By referring to her husband as a lazy fool who were not able to do any work on the farm, Nashita clearly embarrassed him in front of me. In line with the arguments presented by Wikan (1975), this might be seen as a "fair" reaction which was accepted by him because he knew that he was not fulfilling his role as a husband. If Nashita had taken over the responsibility for how to spend the household income too, *she* would be the one who defied her role as a wife and social sanctions from the surrounding community would be aimed at her instead of her husband. *"If a woman does that [managing the household income] people will start talking, saying that she is not respecting her*

husband" (Nashita, 40). In order to avoid this, Nashita's husband was left in charge of decisions about how to spend the household income.

Hiring of outside labour was decided by men alone in 41 % of the households. 44 % of the informants reported that these decisions were made by both men and women, while women were solely responsible for the hiring of labour in only 15 % of the households. Informants supported this division with the remark that women usually stay inside doing housework, and therefore they will have more difficulty recruiting people as hired labour. Men, on the other hand, are more mobile and can easily inquire others about hiring workers. According to my informants, it therefore seemed more natural for men to be in charge of these matters. One day Gagan tried to explain the division of managerial decisions in his household. "*My mother is always at home. Every time you have been to my house she has been there, right? My father, on the other hand, you have barely met. Every day he walks ten laps around the bazaar area, where he stops to talk with other men that he meets*" (Male, 28). In that way his father got news from around the village, and he could easily arrange for hired labour by the help of his contacts. The women in this household did not have this opportunity as they were usually staying inside doing housework and looking after the young children.

Minor challenges are faced by household members on an everyday basis, and decisions about how to handle these issues are made continuously without consulting the rest of the household. But in case of more important decisions, men and women usually gather for a household meeting where they discuss the situation and agree on a decision. Most informants agreed that any decisions that might affect the household in a more substantial way should be made jointly, yet most informants admitted that men are ultimately seen as household heads and have the authority to overrule decisions. The male opinion seems more valuable than the opinion of female household members. The actual authority of women in decision-making can thus be questioned, as it might seem like they are allowed to make decisions as long as no man opposes their judgement. "*Nepal is a male dominated society. Men decide the work tasks, and women do as they are told*" (Male, 24). It seems like men have a veto in decision-making processes that is based on patriarchal structures and tradition of male dominance. This is clearly limiting women's ability to make major decisions without the approval of men.

Next, three factors that might influence the men's domination in decisions-making process is presented. The factors are education, access to financial assets, caste and ethnicity. Each of

them will be provided their own section to further investigate their relevance and possible influence on the authority of the decision-maker.

6.2.1 Education

One informant, a 79 year-old male, told me that even though he had worked on the farm all his life he had delegated the responsibility for major household decisions to his two sons. The reason he gave was that his sons were educated, while he himself was illiterate. Many informants shared the belief that those with education are better equipped to make good and informed decisions. The type of education seemed to have less importance than the amount of time spent at an educational institution.

Education is an important asset in decision-making processes. In addition to teaching people the basic skills of reading, writing and mathematics, education can provide new ideas and perspectives and develop the students' ability of critical thinking. Berkman and Jyothi (2014) argue that education of women can lead to empowerment, which in turn might strengthen women's autonomy in decision-making processes, freedom of expression and control over resources. Education can thus be a means for women to participate more actively in decisions about major investments and hiring of outside labour.

The low enrolment of girls in school in Nepal has inspired donor agencies such as the UN, USAID and the World Bank to spend millions of dollars on education initiatives aimed at girls over the last decades (Rothchild, 2006). Still, a higher number of boys relative to girls attend school and the "gender gap" in education increases higher up in the education system. There are many possible reasons why parents invest less in education of their daughters relative to sons. Rothchild (2006) has identified three of main factors which will be summarised next. The first factor is the tradition of virilocality which has been mentioned earlier. According to that principle, daughters are expected to leave their natal household and move in with their husband's family immediately after marriage. Sons, on the other hand, are generally expected to take over the farm and look after their parents as they get older. This means that investments in daughters would be given to another household, while investments in sons will stay is an investment for the future well-being of the original household. The second reason is that the chances of getting an off-farm job are greater for males than for females. Investing in education for daughters might seem less reasonable if the probability of off-farm work is taken into account. The last factor is that the types of farm-work traditionally done by women

are more concentrated to routine work which generally does not require a high level of education. In addition, being assigned this routine work means that women are needed on the farm for a larger amount of time (Rothchild, 2006). These factors combined shows that the perceived value of female education is lower because there is no apparent direct relationship between later life style of women and education, and because investments in daughters are “lost” to other households when they get married. Even so, the national statistics are showing that there are growing numbers of girls who attend school. This might indicate that the effect of education on authority in decision-making processes will be reduced in the years to come. Unfortunately, I do not have data on the relationship between level of education and autonomy in decision-making. Whether such a relationship really exists is therefore a question for further research.

Another possible effect of increased level of education is that young people of both sexes are finding, or expecting to find jobs off-farm. The prestige of being a farmer has considerably declined over the last decades, and many informants saw farming as “a last resort” in terms of career options for their children. One of the respondents, a 50 year-old male, had three children all staying in Kathmandu for work or studies. *“Farming is heavy work. I do not know what will happen to my land after I retire, but we will probably sell most of the land. I do not want my sons to leave everything to become farmers like me”* (Male, 50). Education is perceived by many of the informants as a means to get an off-farm job. Higher levels of education can thus lead to a stream of young people moving away from agriculture and into other sectors, whether they are male or female. This process is likely to expand in the years to come.

6.2.2 Access to financial resources: The importance of the *Aamah Samoah*¹⁰

As mentioned, men and women have unequal access to resources and opportunities in Nepal. Women have limited access to bank loans and other forms of financial credit. In addition, the tradition of patrilineality, where property is passed on through a male line of inheritance results in women having property rights only through their husbands. Women’s limited access to inherited property causes further problems as all formal lending institutions seek tangible collateral for loan. Women’s access to institutional credit is further restricted by their confinement to unpaid reproductive work, as it is usually men who have waged work and earns the household’s monetary income (Mahat, 2003).

¹⁰ “Mothers group”: A common term for women’s organisations

Access to credit strengthens the male authority of decisions related to household income and possible investments. “Lack of access to credit prevents women and poor people generally, from making productive investments in their land or business” (Hapke, 1992: 21). As long as women do not have access to productive resources they are less likely to make independent financial decisions. With this as a basis, it is no surprise that informal savings groups have become popular among women in Nepal. These groups are easy to set up and they permit women to start saving on their own, even with small amounts, and to grow at their own pace (Subedi, 2010). 36 of the 54 households were members of a local organization or group, many of which were informal savings groups aimed at women, so called *Aamah Samoah’s* (Mother’s group). At the end of my stay in Melamchi, I was invited to join a meeting with one the local groups named “Organized Group for the Upliftment of Society” (OGUS). The next section presents their vision and the efforts they make to increase the female authority in decision-making processes related to economic matters and empowerment of women in society.

OGUS was initiated by a German NGO who first visited Melamchi around ten years ago. They involved some of the local women, and in collaboration with them the NGO announced three local women as group leaders. The other members are expected to set their time at disposal for the organization provided they have the chance. After the German NGO pulled out a few years ago, the group has managed business on its own.



Picture 7: Discussion at the OGUS- meeting

The meeting found place in one of the buildings in the *bazaar area*, but there was no sign indicating that this was the premises of an organization. The meeting room was furnished with wood-benches along the walls, and in the middle there were some tables covered with books in different sizes and colours. The room was sufficiently big for about thirty people, but less

than ten women were present when we arrived. I soon realized that the meeting I had been invited to was just for collecting money from the group members, and that no important discussions were to be held. This enabled me to ask those at present questions about the purpose and vision of the organization, only interrupted when someone came to submit their monthly deposit. One of the group leaders, Sarita (female, 50), became my main informant, but other members occasionally joined our conversation making it more like a group discussion than an interview.

Sarita was very concerned with the challenges facing Nepalese women. Men generally control all monetary assets which mean that women face a lot of trouble getting access to bank loans without their husbands' permission. "*We want to give women the opportunity to manage their own economic assets without the involvement of men. That is the main objective of our group*" (Sarita, 50). In practice, members bring a certain amount of money to the group meeting each month. This money is neatly accounted for in the protocols, consisting of three different books for each member, and deposited in the group's joint account.

Having saved up a reasonable amount of money, members can apply for a loan from the group account. In order to do this, the member firstly has to propose her idea before the group leaders and other group members present at the meeting. For example, if a member wants to loan money to buy a buffalo she has to state why she is in need of a buffalo, and how she will manage to pay the money back. Afterwards, a discussion is held where the person applying for the loan is evaluated on the amount of money she has saved, and her ability to pay off the loan within reasonable time. The investment in itself is also evaluated. Members generally see this evaluation process as a positive arrangement. Sarita told us that even though they want to help everyone, the group has had to refuse members to get the loans they have applied for. This is one of the challenges being a small, informal financial institution. If one member of the group takes out a large loan and cannot pay it back, all the group members suffer. Since the members have to explain the investment and the future strategy before getting the loan, they have the possibility to learn from each other and make better decisions. The investments made by members are thus open not only within the household but also within the group.

All members present at the meeting were certain that the group's effect on the local community had been significant. According to them, OGUS, and similar groups and organizations, have been part of the general improvement of women's situation in Melamchi during the past decade. "*Women used to be "house-prisoners" spending all their time within*

the limited surroundings of their household. Only men were allowed to move around on their own outside the home” (Female, 41). Today, women attend more social activities both with and without a male companion, and they have got improved access to educational institutions.

Another thing that was mentioned was the more practical and relaxed way women dressed today. Only ten years ago it was compulsory for women to wear *sari*¹¹, while today most young females wear *shalwar kurta*¹² as it allows for more freedom of movement. “Western clothes” have also become more common, but the village elders are generally reluctant of this development claiming that it damages local traditions.

Even though many restrictions have been modified, women continue to face legal and social discrimination in various situations throughout their lives. Numerous NGOs and local organizations have initiated work to improve women’s situation and general living conditions, providing both men and women with information, assistance and training. This has been especially important in cases where women have been victims of domestic violence, or have gone through a divorce. In those situations women are usually left down-and-out if they have no other male family member to care for them economically. OGUS and similar organizations have the potential to strengthen women’s social and economic liberation and make them less dependent on men as their economic providers and supervisors. Even though I do not have specific data to determine whether membership in one of these groups actually supports women as decision-makers in economic matters, it seems like a fair conclusion that it has a positive influence on the economic empowerment of women in the local community. These organizations are probably especially important for those who otherwise have little opportunity to get access to financial support and bank loans from regulated institutions.

6.2.3 Caste differentiated decision-making

Various scholars have found that caste and ethnicity have a severe influence on the gender disparity in decision-making (Devkota et al., 1999, Acharya and Bennett, 1981, Majupuria, 2007). During her fieldwork in the Kaski district in Western-Nepal, Adhikari (2013) found that decision-making patterns in agriculture varied according to caste. Her results showed that women in the middle caste (Gurung) households had more influence in decision-making than high-caste (Brahmin) and low-caste (Dalit) households who were usually relying on males to

¹¹ Sari is a South-Asian garment for women. It consists of a long piece of cloth which is draped around the body in a special way.

¹² Shalwar kurta is a Nepalese clothing style. Literally means blouse-*shalwar* and pants-*kurta*.

make decisions(ibid). In this section I will investigate how caste might affect the decision-making processes of households in my study area, and compare these findings with the results presented by Adhikari (2013).

Most informants (74 %) belonged to the high-castes Brahmin and Chhetri, as did my key informants and interpreters. I therefore got more insights in the household dynamics, division of tasks and everyday life of high-caste households than in middle-, and low-caste households. I was told repeatedly that Brahmin was the highest caste of all, and this “superiority” seemed like something they were eager to point out. Being born as a high-caste generally brings about various socio-economic advantages, evident from the high-caste domination of education, administration and economic activities in Nepal. But the high-caste can also be an obstacle as it comes with various rules and constraints like not eating meat, no alcohol and no dining together with others if the rice is cooked by someone from a lower caste (Miller, 2000). In addition, male Brahmins are prohibited from ploughing, and many saw it as degrading for them to perform other types of agricultural work considered dirty and physically demanding. The Brahmins view the ban on ploughing and other activities as a religious prohibition, though no one could really explain the precise connection with religion. In order to avoid breaking these bans, people belonging to the lower-castes were hired to perform the tasks viewed as unsuitable for Brahmin farmers. High-caste women are also exempted from agricultural work if the family has enough money to hire labour. Instead, they are often confined to tasks that are more in line with their “female characteristics”, like housework and taking care of children. As they are less involved in the household labour force, women have little influence in decision-making processes. “Women in communities where there is a high level of ideological concern with female sexual behaviour will have less input into the most important areas of household decision-making which concern the household’s relation to the market economic and the disposal of major economic resources” (Acharya and Bennett, 1981: 255).

High-caste women in the study area had become an important part of the agricultural labour force as male household members shifted their focus to other sectors. In addition, men were more mobile than women in the high-caste households. Because of this it was usually males who moved around the village or migrated, while females seemed more confined to activities close to home. The high-caste households are usually part of the wealthier group in the study

area¹³, but it is usually men who are in charge of economic matters. It seemed like tradition was particularly important in high caste households, and therefore traditional gender roles still determine the male dominance in decision-making processes. Even though these traditions are not resistant to change, altering traditions is generally a slow process which will be further slowed down if the traditions are highly valued by the actors.

Prior to my arrival in Melamchi I had planned to conduct interviews with high-caste, middle-caste and low-caste households in the study area in order to produce data for a comparative study among these groups. My disappointment was therefore obvious when my interpreter told me that there were no low-caste people living in Melamchi. Even though I found this strange, I was later informed that a kind of geographical division of caste and ethnic groups were common in this area, and that most of the small cluster of houses belonged to the same ethnic group or caste. *Melamchi bazaar* was therefore inhabited almost exclusively by Brahmins, but as the settlement has expanded people from other castes and ethnic groups also settled in this area.

One of the last days I spent with my interpreter he suddenly asked me if I wanted to visit a low-caste, Dalit, community. The village was called *Rato Mato* (“red clay”), a name inspired by the characteristic red sand that is found in this area which was previously used as construction material. On the day of the interviews we got up early to make it up to the settlement before the residents left their homes to work on the fields. The road to the village seemed like an endless uphill, and the sun was constantly beating down on us. When we finally arrived in the village, we sat down under a large tree where a group of people had gathered. The first thing I noticed was that the group consisted only of women. In fact, I did not see a single male who were over twelve years of age in the settlement. The women told us that low-caste people met restrictions and prejudice from others, and that they had few opportunities for work other than farming. Most of them owned only a small plot of land (if any) and had to work as hired labour for other families in order to provide for their families. Most of the men in this community had developed a serious alcohol-addiction, causing everyone a lot of trouble. Not only were the men often unable to work, but the money earned by the women was regularly used to buy more alcohol. *“The money we earn should be used to pay the school fee and buy school uniforms for our children. But as soon as we have brought the money home, our husbands to go down to the village and spend it on raksi¹⁴”* (Female,

¹³ None of the Brahmin or Chhetri households were categorized in the “low wealth level” category in the survey.

¹⁴ Local liquor

60). This was a great challenge for the women, as they saw education as a means for their children to have a brighter future than themselves. These low-caste women were forced to take on all agricultural activities (except ploughing), often as hired workers on other farms, and they were in charge of all decisions related to agricultural production. Despite all this responsibility, male household members were still in charge of the household income. This arrangement did not cause the community any good, as it prevented women from having any major influence and obscured their wish to develop the community in a more positive direction.

According to Adhikari (2013), women in the middle-caste households were generally more mobile and had the most influence in decision-making compared to women in both high-caste and low-caste households. The middle-caste, Gurung, females took on the decision-making in the absence of males who had migrated. “However, some respondents reported that even if Gurung males are at home, females still make decisions because the women are very experienced and have more knowledge about agriculture than the men of this caste” (Adhikari, 2013: 90-91). In addition, she found that Gurung women were generally more active in agricultural activities and more innovative than males.

The middle-caste households that I visited belonged to the ethnic groups Magar, Newar and Danuwar. None of the middle-caste informants lived in close to the *bazaar area*, but there was a cluster of houses where people belonging to Magar ethnic group located on the other side of the Melamchi river. Out of the eight informants I interviewed, six of them were women.

I have attempted to make a comparison of the managerial division among gender between the high-caste and middle-caste households in Melamchi, and the results can be seen in Table 4. The low number of respondents from middle-caste households (n=8) is a limitation of the rightfulness of the results presented in the table. They should therefore only be viewed as possible trends and estimations, and not necessarily a correct description of the situation in the study area.

Table 4: Gendered decision-making in middle-caste and high-caste households

Who decides...?	Middle-caste (n=8)			High-caste (n=40)		
	Men	Women	Both	Men	Women	Both
Which cereals to grow?	1	5	2	13	13	14
Which vegetables to grow?	1	5	2	5	17	18
Which livestock/chicken to keep?	2	-	6	8	11	21
Which cash crops to grow?	1	1	6	11	7	22
Amount of chemical fertilizer?	1	1	6	27	3	10
How to spend the household income?	6	-	2	29	0	11
Hiring of outside labour?	2	-	6	20	3	17

Source: Field survey, 2014.

With such a small dataset a single interview might skew the table. One respondent from a middle-caste household had lost his wife a few years ago, and he therefore made all decisions on his own. This was not necessarily the case before his wife passed away, and without knowing the background story it would seem as if he just did not include her in any decisions.

The two most interesting findings in Table 4 concerns decisions about the amount of chemical fertilizer to apply and hiring of outside labour, both of which have a higher degree of joint decisions in the middle-caste households. The reason for this has not been established, and I do not have any caste-differentiated data about factors such as level of education, migration and mobility of females that might be part of the reason. Still, one might make some assumptions based on descriptions given by informants earlier in this chapter. Informants stated that men are generally in charge of hiring outside labour because they are more mobile than women and therefore have the opportunity to meet people and arrange for hired help. If a higher portion of females are part of decisions about hiring of outside labour in middle-caste households than high-caste and low-caste households, one might assume that they are more mobile than the others. Women with limited mobility do not have the opportunity to move around the village to have conversations with people, which is vital for the hiring outside labour. Basic literacy and numerical skills are a foundation for determining the amount of chemical fertilizer to apply, thus one might assume that men and women in the middle-caste households have more equal level of education. In 5 of the 8 middle-caste households a

household member had attended agricultural training programmes, but informants did not state whether the participant was male or female. These results remain nothing but assumptions, but they might serve as basis for further studies of a similar kind. Also, these assumptions supports the findings presented in Adhikari (2013), as women from middle-caste households seems to have more influence in decision-making processes than women in high-caste and low-caste households. Caste is likely an important factor in determining the position of women as decision-makers in Nepal.

6.3 Introducing Weber to Melamchi

As mentioned in the theory chapter, Weber (1968) classified three types of domination (or authority) according to the kind of claim to legitimacy that is typically made by each of them. These three types include; traditional authority, legal-rational authority and charismatic authority. Earlier in this chapter it was concluded that men generally make the major decisions in households in Melamchi. I therefore suggest that *traditional authority* can be used to explain how the authority of men in decision-making processes obtains legitimacy. The aim of this discussion is thus to provide an explanation of why men's domination in decision-making is accepted by the other household members.

I have previously proposed that the legal-rational authority is of little relevance in this case. This type of authority is described as power legitimized by law or written rules and regulations (Kendall, 2014). Legal-rational authority is generally more relevant in cases where focus is put on the authority of states (large-scale studies). This study put focus on the household level (small-scale study) and men's legitimate domination in decision-making, which is why legal-rational authority will not be included in the following discussion.

Charismatic authority is something that both men and women can have. It can be described as a *delegated* status, as opposed to an *innate* status like traditional authority. The leaders of the OGUS group can be argued to be examples of people in Melamchi who inhabit charismatic authority. They were chosen to be leaders because of their enthusiasm, knowledge and fearless character. One of these charismatic leaders is Nashita, and her advice is often sought by group members and others. She was also an important part in the opening of a health clinic for local women who had experienced domestic violence, an issue that was previously considered taboo and rarely talked about. Despite all this, Nashita did still accept her husband's dominance in cases concerning the management of the household income.

Important reasons for this can be that he is the rightful owner of the property and farm, and has easier access to financial services. Even though Nashita was a member of the OGUS group the loan amounts that could be provided by OGUS were not always sufficient for larger investments on the farm, and did not pay for her children's education and such. "People have a greater tendency to accept authority as legitimate if they are economically or politically dependent on those who hold power" (Kendall, 2014: 378). The three types of domination do not necessarily exist separately. In cases where two or more types of domination exist, one might overrule the other. Hence, a hierarchical arrangement of these three types of domination seems to exist. Traditional authority appears to be more powerful than charismatic authority in Melamchi, which is why focus will be put on traditional authority in this discussion.

Parampara (tradition) was mentioned by most informants as an important factor in the gendered division of work and managerial responsibilities. *Parampara* strengthened the authority of males in decision-making processes concerning major issues like managing the household income and new investments on the farm. "*This is how things have always been, it's our parampara*" was a common reply from informants whenever I asked why men were allowed to make decisions on behalf of the household without any objections from the other household members. Thus, men's traditional authority appears to be the most appropriate explanation of why their domination in household's decision-making obtains legitimacy in the study area.

As mentioned in the theory chapter, the three types of domination can only be understood as *ideal types* and will therefore not provide a complete explanation to a complex and context-dependent arrangement. Weber did not use the Nepalese society as inspiration for his theories, so we should imagine there to be other elements that play an important role in shaping decision-making processes in the study area. Social structures like the customs of virilocality and patrilineality have a strong influence on the decision-making process. Property is passed to the next generation through a male line of inheritance, while women have access to property only through their husbands. Once women get married they move in with their husband's family, but as women move away from their natal homes, they also lose authority in decision-making processes. "*I got married when I was only 13 years old. After I got married I had to move to my husband's village where I did not know anyone. I have to respect my mother-in-law and the rest of my husband's family so I don't speak freely. That is why I love visiting my parents back home* (Female, 25).

Evidently, traditional authority is supported by social structures and institutions in the Nepalese society. Weber did not explicitly include these in the definition of traditional authority, but I argue that they are so embedded in the Nepalese society that they in some ways can be understood as part of the *parampara* and should therefore be included as a part of Weber's definition of traditional authority.

“An ideal type is an abstract model that describes the recurring characteristics of some phenomenon” (Kendall, 2014). The purpose of this simplification is to capture the most essential characteristics of a phenomenon in a model which can be used as an analytical tool in research. Ideal types can be seen in relation to *prototypes* as they are described in Aase and Fossåskaret (2007). In the methodology chapter, *categories* were described as a measure for organizing observations. It has been argued that this method can be a bit rigid, especially when it comes to categorizing immaterial phenomena like work, recreation or equality. Instead of organizing observations in categories, which are absolute, it might be more appropriate to state where an observation is located in relation to a prototypical marker (Aase and Fossåskaret, 2007). For example, the phenomenon *work* is something that most people have an idea of. The “prototypical” work in Norway lasts from 8am until 4pm, Monday to Friday. Working as a newspaper carrier two hours every Thursday can also be defined as work, but the characteristics of that job places it further away from the “core” meaning of the term as it is understood by most Norwegians. A prototypical understanding of observations allows us to locate them in relation to prototypes which are found in our cognitive landscape (Aase and Fossåskaret, 2007).

If the three types of legitimate domination are understood as prototypes, not as absolute categories, we can conclude that the legitimate domination that influences gendered division of decision-making in Melamchi is located close to the ideal type of traditional authority. Men's authority in decision-making power obtains legitimacy because of *parampara* (tradition), but social structures and institutions also affect the decision-making power and authority of men and women in this area. This is why I argue that they should be included in the definition of traditional authority.

CONCLUSIONS: DOES FEMINIZATION OF AGRICULTURE MAKE A CHANGE?

The objectives of this study have been to describe the current farming system of Melamchi village in central Nepal, and to investigate various indicators of a “feminization of agriculture” in this area. Gender roles and relations in agriculture, and particularly the gendered division of agricultural labour and managerial responsibilities in households, have been discussed. This study has also investigated why the male dominance in decision-making in household is accepted as legitimate by the other household members. In the first part of this chapter I will summarize my findings in order to provide answers to the research questions. Based on these conclusions, I will discuss the future trajectory for agricultural production in Melamchi. If a feminization of agriculture occurs in this area, will it make a change?

Conclusions

I have described the farming system of Melamchi by applying a farming system framework. Various units of the farming system have been identified, and their functions and importance have been discussed. These units include households, land, crops, livestock, water resources and forest. Extra attention was given to the household unit as it is the primary unit of organization, labour and decision-making and thus of particular interest for my research. This descriptive analysis was not aimed at describing each individual farm in Melamchi. Rather, I tried to make a more general illustration of the community’s farming system.

A farming system model was constructed in order to simplify the complex nature of the farming system and illustrate the interrelatedness of its units. In addition to depicting the various units and the flows of energy among them, three *parameters* were included in the model in order to show that external factors can have strong influence on the farming system, even though their importance and effects was not extensively addressed in this thesis. The parameters included were education and market for agricultural products and off-farm labour.

The farming system of Melamchi is based on traditional skills and methods. The agricultural production is largely dependent on rain-fall for irrigation, even though a few irrigation facilities have been constructed. Most farmers make little use of external inputs and new technology, but the usage of chemical fertilizer and pesticides have increased in recent years.

63 % of the informants have included new crops as part of their agricultural production during the past ten years. I found that wealthy farmers are more likely to introduce new crops than farmers classified as having a “low” or “middle” wealth level. Based on this observation it can be argued that the wealthy farmers are more innovative than others, but I argue that they are more inclined to try new crops because they can afford any necessary equipment needed and are less dependent on the immediate success of the new crop.

Brauw et.al (2005) divides the definition of feminization of agriculture into two types, namely a feminization of labour and a feminization of management. This definition was used as a basis for the analysis of a possible feminization of agriculture in Melamchi. In Chapter 6, the household division of labour and managerial responsibilities in the study area were identified. The division of agricultural labour indicated that some tasks were solely done by either men or women. For example, informants characterized sowing as a “female activity” while ploughing and levelling of land were described as “male activities”. The most important reasons for this division were *parampara* (tradition), and the difference in physical strength between men and women. Even though interviews and conversations left me with the impression that the division of tasks was more or less unquestionable, I found this arrangement less rigid than informants claimed it to be. Women could potentially take over the responsibility of “male activities” in cases where male household members were absent. Thus, the strict division of tasks could be compromised as people migrated or moved their attention to off-farm work. Because men are more mobile, have higher levels of education and easier access to financial assets than women, they are usually the ones to leave agriculture in favour of other types of work. As a result of this women have to take over larger shares of the agricultural work. It can therefore be argued that a feminization of labour has taken place. Women are not completely independent of men in agricultural production as, in contrast to most other activities, they were still prohibited from ploughing the fields. Informants stated that if they had tractors, women could also do the ploughing. Hence it can be suggested that introducing new methods and technology have the ability to change the traditional division of agricultural tasks in this area.

In most households managerial decisions are made jointly by men and women. According to informants, major decisions should be discussed among all household members before any conclusion is reached. Even though, decisions concerning particular activities were dominated by either men or women separately. In half of the households women alone are in charge of decisions related to the growing of vegetables, while men were in charge of this in only 11 %

of the cases. The predominance of women having this responsibility is largely because they are in charge of preparing food for the rest of the household. Men, on the other hand, are usually in charge of decisions about hiring of outside labour and managing the household income. Since men are more mobile than women they have the opportunity to meet people and make arrangements for hired labour. Men were in charge of decisions about how to spend the household income in 67 % of households, while women were in charge of these decisions in only 2 % of the households visited. *Parampara* (tradition) was the most commonly used explanations why men dominate these decisions. It is generally men who own property and have access to financial services. Women's influence in decisions concerning how to spend the household income are weakened by both patrilineality, the practice where property is passed to the next generation through a male line of inheritance, and virilocality, where women move in with her husband's family after marriage. One female informant stated that if a woman was managing the household income people will start talking behind her back and claim that she is not respecting her husband. Clearly, social sanctions from the community are a means of preserving the male dominance in management of the household income. Based on this analysis, I argue that there has not been a feminization of management in Melamchi. Even though women have gradually been assigned more agricultural tasks as men migrate or shift their attention to other types of work, they have not taken over the main managerial responsibilities on the farm. Even in households where women are in charge of most decisions related to agricultural production, men have "veto power" and can overrule their decisions. As mentioned, a feminization of agriculture implies a strengthening of women's position in agricultural production and in farming households. An empowerment of women could therefore be expected as a result of agricultural feminization. If women take on a larger share of the agricultural work without having any real influence on how the farm and household income are managed, this development cannot be described as empowerment, but rather as *exploitation* of women. Unfortunately, this seems to be the case in many households in Melamchi. I therefore argue that the feminization of agriculture in Melamchi is limited, and that a more holistic explanation is needed to describe the situation studied.

I used Weber's theory of domination to explain why men are allowed to exercise their authority over women in household decision-making processes in Melamchi. Most informants mentioned *parampara* (tradition) as the reason for the male dominance of decision-making processes, thus traditional authority seems to be the best explanation for how the authority of men in decision-making processes is legitimized. I have also suggested that social structures

like patrilineality and virilocality should be included in the definition of traditional authority in order to strengthen it. If this is done, the traditional authority seems to be a good explanation why men's authority obtains legitimacy in households in the study area.

Based on these conclusions focus is now put on the last research question which is related to the possible changes following a feminization of agriculture. I will discuss what might happen if a feminization of agriculture occurs in Melamchi in the future, and the ways it might influence food security. Lastly, potential measures for improving the livelihoods of farmers and the conditions for agricultural production are examined.

Does a feminization of agriculture make a change?

Nepal has experienced a gradual decline in food security because national agricultural production has not managed to keep up with the population growth. Ensuring food security is among the top priorities of governments in all South-Asian countries, but the strategies for reaching this goal are not fixed. Various scholars and politicians have different opinions on how to ensure food security in the most efficient and sustainable manner, but it is a common mistake among most that they fail to include gender in their analyses and initiatives. If men and women have different objectives and goals for agricultural production, the gender of the person who manages the farm can influence productivity. Hence, a feminization of agriculture might potentially affect food security.

In the previous section I concluded that the feminization of agriculture in Melamchi was limited. Some findings indicated that a feminization of labour had taken place, but women's role in decision-making is still minor when it comes to decisions with severe influence on the household and agricultural production. I argue that agricultural feminization might still be a topic worth discussing since women's level of education and access to financial assets are increasing, and because the numbers of female-headed households in rural areas are expected to rise because of increased male migration. If women get more influence in decision-making processes related to agricultural production, what kind of decisions will they make? Also, I question whether decisions made by women will deviate substantially from decisions made by men. WED scholars and ecofeminists have claimed that women are more environmentally friendly than men, and that their focus will be on subsistence farming and increasing biodiversity. I want to examine the truthfulness of these assumptions, before I move on to

examining the relevance of studies concerning gender roles and relations for policy initiatives that aims at increasing agricultural production and improve the livelihoods of farmers.

As mentioned, men and women are often seen as having different objectives and motivations for farming (Sachs, 1996). Esther Boserup (1970) argued that men are generally concerned with making money and more likely to introduce innovations and growing of cash crops, while women are more concerned with feeding the family through subsistence farming (Boserup, 1970). This is agreed upon by WED researchers and ecofeminists, who claim that women share a special bond with nature and have an inherent desire to take care of the environment by promoting small-scale, subsistence farming. In half of the households interviewed women made all decisions about the growing of vegetables, and these vegetables were usually cultivated for subsistence use only. With support from ecofeminists and WED literature, it can be argued that the high number of women in charge of decisions related to the growing of vegetables is evidence of women being more concerned with growing crops for subsistence use, as an alternative to cash crop cultivation. Based on my interviews and observations, the fact that women are responsible for preparing food for the rest of the household seem like a more likely explanation for their interest in the cultivation of vegetables. This shows that the environmentally friendly nature that women are ascribed in WED literature is not necessarily a rightful description of reality. One of the major problems of the WED approach is the generalization of women by representing them as one homogenous category, both within and across nations. “This approach is problematic mainly because it erases the diversity between women that prevails everywhere and in specific ways in Nepal” (Buchy and Rai, 2008: 131). Another critique of WED and ecofeminist research is that their focus is often limited to women and therefore fails to take into account that women’s relation to environment cannot be understood outside the context of gender relations in resource management and use. Hence studies that include both men and women, and the roles and relations between them, results in more nuanced conclusions than studies that are limited to women alone (Jackson, 1993).

The gendered division of labour explains why women perform certain tasks instead of men in Melamchi. Yet this division does not necessarily mean that women have *chosen* to perform these activities. “For women, even less than for others, one cannot assume that action reflects choice” (Jackson, 1993: 1954). Since men are usually in charge of managing the household income, they are also the ones who decide whether to introduce new inputs, crops and technology or make investments in irrigation and land improvements. Men have the

opportunity to make major decision and changes on the farm, while women are dependent on male approval for their suggestions. This might be why women usually choose to maintain the small-scale subsistence farming with little use of inputs and new technology. Another reason might be the practice of virilocality. From the moment a woman gets married she has to move in with her husband's family where she is obliged to obey the rules and regulations of the new family. Since she is not part of the original household she has little authority in decision-making processes and limited opportunity to make suggestions for improving the way the farm is operated.

One of the most surprising discoveries I made during my fieldwork was that people in Melamchi were generally less interested in agriculture than I had expected. Most of them wanted to find other types of work for themselves and for their children, even if this meant leaving the farm and moving away from Melamchi. Many informants stated that agriculture is the only real option for people staying in this area, but it is hard work and generally not a desired way of life. A lot of time and effort have to be invested in agriculture in order to make any profit from it. *"If you don't have any interest in agriculture then the production will be low, you will not make any money, and your life will be difficult"* (Male, 71). Most informants agreed that something had to be done in order to make agriculture more profitable and ensure that the local agricultural production is sustained for years to come. *"There is little profit and reliability in agriculture. It is an unstable source of income. Because of this, the men migrate and the women are left with more work on the farm. If we had irrigation systems and tractors, more people would continue farming"* (Female, 50). Several informants agreed that introducing new crops, tools and technology, and investing in irrigation systems would make agriculture more attractive. *"There is a great need for better equipment and machines. With new technology and innovations it will be possible for us to make money from agriculture"* (Male, 28). This was not exclusively a "male opinion", as women also wanted intensification, innovations and technological development in agriculture. One of my female informants stated that; *"We need to focus on just one thing in order to make agriculture more profitable. Specialization is needed in order to rationalize agricultural production in this area. Farmers should choose to focus on cash crops, growing vegetables or something else"* (Female, 25). This woman's opinion stands in sharp contrast to the descriptions of women's interests and ideals as they have been described by ecofeminists. No informants, neither female nor male, mentioned environmental degradation as a major challenge for the future.

Instead, combatting poverty and malnutrition, and reducing migration flows from rural areas were seen as bigger concerns for most of the households that I visited.

I did not find any significant differences in the opinions of men and women in relation to the way agriculture should be performed. Neither interviews nor observations indicated that women were particularly concerned with ensuring agricultural production that is environmentally friendly. As discussed above, the fact that women are mostly in charge of growing vegetables for subsistence use is not evidence enough to say that a feminization of agriculture would lead to increased agrobiodiversity and a focus on small-scale, subsistence farming. I therefore argue that context and information about prevalent gender roles and relations in an area should be taken into account before concluding that women have a more environmentally friendly nature than men. Interviews with female farmers revealed that most women wanted to increase the agricultural production and generate more income by introducing new inputs, crops and technology and investing in irrigation systems, *just like their male counterparts*. But as discussed in Chapter 6, women lack opportunities for investment in agricultural production such as financial assets and property rights. “If certain women are closely involved with natural resources, this may reflect gender-divided roles and lack of any other economic opportunity, rather than any inherent caring relationship” (Green et al., 1998: 276). Based on this discussion I argue that women in Melamchi are not necessarily more *concerned* with subsistence farming; rather they have been *confined* to it.

Feminization of agriculture will probably have little effect on the agricultural production in Melamchi since men and women seem to have more or less the same objectives of farming. Nonetheless, if men move their attention away from farming while women are prevented from making decisions and investments for improving agricultural production, the development in the agricultural sector will stagnate and goals for ensuring food security will not be met. Ensuring a flexible farming system that can rapidly adapt to change is important considering that the future conditions for agricultural production in this area are uncertain.

Notions of uncertain and variable climatic conditions and an unstable market for agricultural commodities make it extremely difficult to predict the future condition for agricultural production in Melamchi. The situation in Nepal can already be described as challenging because of the limited space for expansion and dependency on the monsoon rain. Informants expressed a wish for their children, both sons and daughters, to move their attention from agriculture to off-farm waged work. In order to inspire children to become farmers there is a

need to reduce the physical demands of farming and make agriculture a more profitable and stable source of income. Local agricultural productivity is a main variable for ensuring food security, but if farming is considered “a last resort” it will be difficult to motivate people to remain in this sector if they have other opportunities for work.

Agriculture is a gendered practice, and gender-blind policies should be therefore avoided in order to secure agricultural development and food security in Nepal. “If development is not engendered, it is endangered” (Human Development Report, 1997, cited in Jiggins, 1998: 261). It is evident that women are important agents of food production, which is why they should be a priority in agricultural programs and policies. A survey conducted by FAO revealed that female farmers receive only 5 percent of all agricultural extension services worldwide (FAO, 2010). One reason for this might be that most extension officers are men, as is the case in Nepal. As women take over a larger share of the agricultural work, more women should also be in charge of policies concerning agricultural production. Increasing numbers of female extension officers might result in more gender- sighted policies and measures. I believe that extension services developed by women will be more adapted to women’s needs and interests, and thus ensure more effective policy interventions. As long as women cannot buy essential inputs like seeds, tools and fertilizer, or invest in irrigation and land improvements without their husbands, it is hard to believe that agricultural production will increase in households where women are in charge of farming. I believe that women’s contribution to food production, and thus food security, would increase if they were allowed to enjoy equal access to essential resources and services to men. Hence, economic empowerment and an elimination of laws and practices that discriminate against women are central measures in this work. Information is critical in order to develop effective policies that can improve the situation for female farmers. I hope that my research might contribute to enhanced understanding of what men and women do in agriculture in Melamchi, the reasons for this division and the mechanisms that sustain the gender roles and relations in my study area. In addition, it might enhance the understanding of what prerequisites people in Melamchi have in order to face the challenges of an uncertain future. Hopefully, this information can be of importance for potential strategies aiming at ensuring a positive agricultural development that will improve the livelihoods of both men and women in Melamchi.

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APPENDIX: Proposed questionnaire for the household survey

Household no. _____

VDC _____ Settlement _____

Caste _____

1) Household (pariwar) map (gender, age, activity of all hh members)

2) Land

How much khet owned? ____ ropani

How much khet cultivated ____ ropani

How much bari owned? ____ ropani

How much pakho land owned? ____ ropani

Do you own land that was cultivated before that is not cultivated now? _____ ropani

3) Livestock

Buffalo ____ nos Cow ____ nos Ox ____ nos Goat ____ nos Chicken ____ nos

4) What is needed in order to produce more crops on the land you cultivate?

Rank (1 most important – 6 least important)

More water	
More labour	
More manure	
More chemical fertilizer	
Better seeds	
Better extension service	

5) Have you planted some new crops or vegetables during the last 10 years?

No Yes

If yes, which crops/vegetables? _____

6) Does any children/son in the family want to take over the farm?

No Yes

7) Who is mostly doing what? (if fifty-fifty, mark both boxes)

	Men	Women		Men	Women
Ploughing	<input type="checkbox"/>	<input type="checkbox"/>	Collecting fodder	<input type="checkbox"/>	<input type="checkbox"/>
Irrigating	<input type="checkbox"/>	<input type="checkbox"/>	Collecting fuelwood	<input type="checkbox"/>	<input type="checkbox"/>
Weeding	<input type="checkbox"/>	<input type="checkbox"/>	Milking	<input type="checkbox"/>	<input type="checkbox"/>
Harvesting	<input type="checkbox"/>	<input type="checkbox"/>	Threshing	<input type="checkbox"/>	<input type="checkbox"/>
Sowing	<input type="checkbox"/>	<input type="checkbox"/>	Winnowing	<input type="checkbox"/>	<input type="checkbox"/>
Herding	<input type="checkbox"/>	<input type="checkbox"/>	Manure fields	<input type="checkbox"/>	<input type="checkbox"/>
Levelling land	<input type="checkbox"/>	<input type="checkbox"/>	Applying chemical fertilizer	<input type="checkbox"/>	<input type="checkbox"/>

8) Who decides:

	Men	Women
Which cereals to sow?	<input type="checkbox"/>	<input type="checkbox"/>
Which vegetables to grow?	<input type="checkbox"/>	<input type="checkbox"/>
Which livestock/chicken to keep?	<input type="checkbox"/>	<input type="checkbox"/>
Which cash crops to grow?	<input type="checkbox"/>	<input type="checkbox"/>
Amount of chemical fertilizer?	<input type="checkbox"/>	<input type="checkbox"/>
How to spend the household income?	<input type="checkbox"/>	<input type="checkbox"/>
Hiring of outside labour?	<input type="checkbox"/>	<input type="checkbox"/>

9) Have you got any agricultural training/education?

No Yes

10) Are you member of any local group/committee related to agriculture?

No Yes

If yes, which one? _____

11) Is there any wage difference between male and female in agricultural activities?

No Yes

12) Are there any agricultural activities that women cannot perform?

No Yes _____

If yes, why not? _____

13) Are there any agricultural activities that men cannot perform?
No Yes _____
If yes, why not? _____

14) Other comments/information:

15) Wealth ranking of household (interviewer's evaluation):
Wealthy Middle Poor