# CHAPTER I INTRODUCTION

## **1.1 Background of the Study**

Water is one of the basic needs of human beings. It was formed on Earth at the same time when the planet was born millions of years ago. Estimates place the total volume of water in the world at around 1.4 billion cubic kilometers. Most of this water is stocked out of reach as in a fixed deposit in a bank-in the atmosphere, in the oceans, in the polar ice caps and glaciers, in lakes in the soil, in plants and animals and in underground reservoirs called aquifers. Only a small portion is in constant circulation like a current account in a bank - in the form of evaporation from ocean and lakes, in precipitation as rain and snow, as running water in rivers and streams.

Water is fundamental to the material basis of both life and livelihoods. Access to safe drinking water should be considered a basic right of any citizen and the provision of drinking water ought to be the primary duty and responsibility of state. Water is life. Water serves a variety of purposes. It is used for domestic needs such as drinking, washing and bathing and for home garden, livestock trees and other productive uses. Water scarcity affects the rural household economy and environment in multifarious ways, resulting in hardships such as the necessity of carrying heavy pots of water several kilometers everyday to meet household needs.

Nepal, being the second richest country of the world in fresh water resources people are depriving of safe drinking water. However, Nepal faces an enormous task in providing potable water facilities to a rapidly growing population widely scattered over its rugged terrain. Only one third of all household have access to piped water facility. Slightly more than one third obtains drinking water from tube or covered wells. The rest utilize open reservoirs and stream as sources of drinking water. Access to piped water is available to 58 percent of urban households while only 31 percent of the rural households enjoy this facility (Rana, 2002). Traditional ponds, springs, waterfalls and rivers are the major sources of drinking water.

Various reports are showing that with the lack of safe drinking water many Nepalese villagers are facing waterborne diseases. Piped water is very easy to collect and few chances are there to be water dirty polluted (Thapa, 2002). Moreover this situation relates to the burden undertaken by Nepalese women to fetch water for family members and cattle that has direct manifestations in their personal health, workloads, participation in productive and community works. As women are the ones who fetch water, they value improvements in water supplies more than men and so have a vested interest in keeping the system functioning (World Bank, 1993). Sustainability of water supply projects dramatically enhanced when women have key responsibilities.

With the march of time and engendering of development paradigms (Women in Development and Gender and Development), more gender sensitive and women specific policies and strategies have been evolving in drinking water sector. any study has not been done concerning with water and society and water and gender. Various policies and planning are made focusing on fulfilling water need of people but their implementation has been remaining very weaker ones. Sociological analysis can guide the society an appropriate change as well as planning way of water sector of Nepal.

A study of gender relations, which encompasses the interactions between women and man in various domains and power relations between the two senses, is a prerequisite the understanding the situations of women. Gender systems are linked to a larger social formations, such as religion, ethnic identity, etc. and so are reflected in social traditions, but are also dynamic in nature, influenced by forces of social and economic changes (Rana, 2001). Any gender sensitive development information, for instance drinking water supply system, is expected to play a vital role in facilitating positive changes in gender relations. Helping to organize women users to have equal access and ownership along their male counterparts in management of drinking water supply system is an example of gender relations However, as Uprety (1999) claims, water sector activities need to be gender-sensitive at all levels, from policy-down to community activities, and gender concern need to be integrated in policies, plans, programs and projects. Little progress has been made in this area. More gender specific data are required in the water sector. Women play the central part in the provision, management and safeguarding of water.

In this context, the present research proposes to investigate the role of drinking water supply system in bringing about changes in gender relation and thus change in the society in semi-rural setting of Nepal. The focus of the study is to analyze the impacts on the lives of women-water collectors and their gender roles by the water supply system before and after the drinking water project. This proposed study has been conducted in Pelakot VDC, Syangja district, where water supply system (PUDWP) was lunched by Ministry of Water Supply.

#### **1.2** Statement of the Problem

Drinking water is a social resource necessary for every family in the community. It is a part of everyday life of an individual and the concern of public interest in areas where there is lack of easy access and control of water resources cooperation, competition and conflicts among water users exit around the issues of water resources and management. Supply of drinking water system, as a technical process, cannot be isolated from and independent of social processes. Management of water system is an intervention to balance power relations for equitable access and collective ownership of community, (Dixit and Gyawali, 1997).

The water sources are very few in this study area. The renowned river 'Andhikhola' is perennially following beside the project area. But it is meaningless for drinking water purpose. Traditional ponds, springs are the major sources of water for the villagers. These sources were not sufficient for the villagers for water need. Women used to go water sources at mid-night to fetch water pots. Water is enough during the summer and very scarce in winter (dry season). After long study of Department of Water Supply of Nepal lunched a project named "Pelakot Udiyachour Drinking Water Project" (PUDWP) Syangja during the fiscal year 2039/40 B.S. and the project was successfully completed in 2040/41 B.S. The total cost of project was Rs. 1170729/10 (Eleven lakh ninety thousand seven hundred twenty one rupees and ten paisa). During the project period, only eighteen water taps were erected to provide drinking water for people of two wards of VDC i.e. ward no 5 and 6 on the basis of population distribution.

Socio-economic impact of any development program should be at least equally shared by the women folks. In case of drinking water project, such impacts would be experienced even more by women in general and rural women in particular. The social and economic implication of drinking water project on women could be viewed in two ways: (i) women as recipient of the benefits of water supply program; and (ii) women's participation in the project (particularly in the construction and post construction phase). Women are involved in either managing the domestic affairs or are engaged directly in some economic activities. Both these involvements are contributing to the economic and social betterment of the household and the society concerned. More time and labour of women is spent in water managing process. Women and girls are the primary users and collectors of drinking water, especially in the remote rural areas and hilly regions. Women are reported to have spent as much as one to six hours a day for fetching fewer water for their family (Uprety, 1999).

Abundant time of the women has been saved by the supply of piped drinking water. Time saved from availability of drinking water is an important aspect, but it may not necessarily suggest that women's overall work load has decreased or that the saved time is being utilized for meeting her other needs necessary for improving her status within family and society at large. This issue must be analyzed from micro level studies with in depth sociological perspectives to reveal the changes that have come about in the daily time management of the women. This study is not so ambitions to address all of them due to its own limitations. Moreover, it is expected that it makes some contributions to make the understanding the nature and context of the problems associated with the drinking water and related social problems vivid. In other words, the importance of the changes brought about during and after the intervention of drinking water supply in a particular society to address the strategic needs of women should be one principal area to look for its impacts on gender relationship. In this connection this study will be focused on the following research questions:

- 1. What necessitated the beginning of the drinking water project in the village?
- 2. How was the project initiated and eventually constructed?
- 3. How did the women contributed in the construction of the project?
- 4. How was the women's working pattern in the domestic affairs before the implementation of the project?
- 5. Is there any change in the working pattern of the women after the construction of the project? If yes, in what ways?
- 6. Is the project leading to the women empowerment in the study area? If yes, in what ways?

## **1.3** Objectives of the Study

The general objective of this study is to explore and understand the major impacts of PUDWP among the women in the selected area of Pelakot, Syangja. But it had three-fold specific objectives stated as follows:

- 1. to identify the women's participation in PUDWP's activities.
- 2. to analyze the role of PUDWP in changing women's working pattern in the daily life.
- 3. to study the contribution of PUDWP in women empowerment in the study area.

## **1.4 Definition of Terms**

**Women's Participation:** The way women of Pelakot, Udiyachaur, in Syangja district involved in the various steps of the Pelakot Udiyachaur Drinking Water Project such as its construction, management and maintenance.

**Women's Working Pattern:** The ways women of Pelakot, Udiyachaur, Syangja perform their household related tasks and roles to meet their daily basic and additional needs.

**Women's Empowerment:** The empowerment and capacity building of women of Pelakot, Udiyachaur, Syangja.

## **1.5** Conceptual Framework of the Study

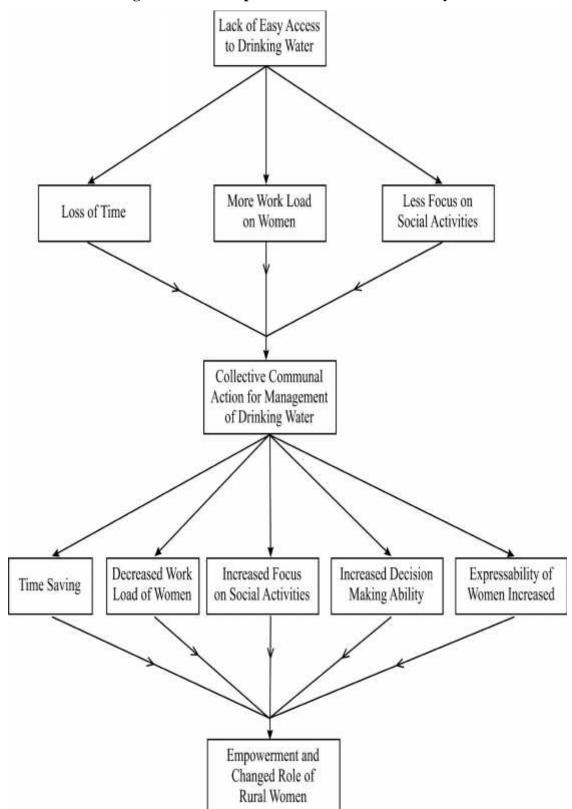


Figure 1.1 : Conceptual Framework of the Study

The above conceptual framework makes it clear that lack of easier access to drinking water had been a curse for women in Pelakot. They faced heavy work load as they had to allocate more time for collecting water and they had little attention on social activities. But their collective awareness and participation of women along with other members of society ensured the construction of drinking water project. Their continuous engagement in construction and management of drinking water project has increased their decision making power, promoted the attitude of active participation and saved their time subsequently. Now we can see them getting empowered and contributing more and more in the welfare of self, family and the whole society.

## **1.6** Importance of the study

This study is an academic study, thus its immediate importance is the achievement of the Masters Degree in Sociology. The study may assist those willing to identify the factors that facilitate or hinder participation in community activities from gender perspective. The present study may be helpful in providing some information needed by the sectors concerned and what extent drinking water supply can become means to facilitate the process of addressing the needs of women for changing their position in society. Interested ones may benefit from this study to understand the implication of a drinking water project for rural women and the way it can become a factor for socio-cultural change. As applied importance, this study may also help to lunch similar programs in other places which do not have excess facility of drinking water. Besides, it may assist the future researchers interested in undertaking study concerned with similar issues.

#### **1.7** Limitation of the study

Each and every study has some of its own kinds of limitations because of time, space and condition. Each and every task has some shortcoming and drawbacks due to many constraints. And, also this study is not free from such shortcomings, which is universal. The following are the limitation of the present study.

This is a micro level study of limited area of 'Pelakot Udiyachour Drinking Water Project', Pelakot VDC word no 5 and 6 of Syangja district. The study had been undertaken limiting itself within the walls of Aayojana area. Sociological understanding as well as impact of water project on gender role in society will be core subject matter of the study. The findings and conclusion drawn from this study may not widely be generalized. Gender aspect of drinking water system can be viewed in a "holistic approach". The study site is composed of multi-ethnic group people with different cultures, languages, social norms and values, etc. which are difficult to understand and analysis in this study of short duration. The present study is only for the partial fulfillment of the Master's Degree Sociology. So, detail study was not possible due to lack of enough resources. In spite of these limitations, the study has tried to meet the objectives and the topic of the study itself as far as possible.

## **1.8** Organization of the study

This dissertation is divided into eight chapters inclusive of introduction to conclusion. Introduction presents the background of the study. Drawn from the background are the statement of the problem, objectives of the study and also rationale, limitations and the organization of the study. On the other hand, chapter two contains the literature review pertinent to the subject of the study. Further the theoretical perspectives utilized in the study are discussed likewise, chapter three draws attention to the research methods adopted by the study. This chapter deals with the research design, study area selection, sampling, data collection and data analysis adopted by the study.

Chapter four presents a brief introduction of physical setting of the study area, cultural setting, and socio demographic profile of the respondents. Chapter

five, six and seven are the core chapters. Geographical, socio-cultural and economic settings are presented in chapter five. Major discussions of this chapter are women's participation in PUDWP's activities and their role in PUDWP before and after. Chapter six analyzes the role of PUDWP in changing women's working pattern. This chapter describes the ways PUDWP is changing these women's working pattern on following parts, source of collecting water before the PUDWP's completion, time spent for collecting water before the project construction, working pattern of women related to drinking water supply after PUDWP's construction and major changes in women's working pattern related to drinking water supply. Moreover, chapter seven focuses on the ways PUDWP has played its role in empowerment of women in this village. Finally, in the eight chapter, the summary, conclusion and recommendations have been presented. The dissertation has been ended with the note of literatures reviewed and the references cited.

# CHAPTER II REVIEW OF RELATED LITERATURES

#### 2.1 Theoretical Discussions

This chapter explains basic concepts and theoretical guidelines that have guided this study. They include the concept of gender, gender relations, and people's participation in development undertakings. Besides, it also includes a general description of related literatures

#### 2.1.1 Gender and Gender Relations

The concept of gender makes it possible to distinguish the biologically founded, sexual differences between woman and man from the culturally determined differences between the roles given to or undertaken by women and men respectively in a given society. The first are unchangeable, like a destiny. The latter are workable and may be changed by political and opinion shaping influences. The concept of women in development is concrete and may lead to marginalizing women as a particular species with inherited handicaps. The concept of gender in development is abstract and opens up for the realization of women's productive potentials in development. (Lise, 1997)

The term gender relation refers to the relations of power between women and men which are revealed in a range of practices, ideas, representations including the provision of labour, roles and resources between men and women. Gender roles mean the sets of cultural expectations that define the ways in which the members of each sex should behave. (Lawman, 2004). Gender analysis begins from a consideration of the ways in which men and women participate differently in the household, economy and society. Secondly, it seeks to identify the structures and processes–legislation, social and political institutions, socialization practices, employment polices and practices that can act to perpetuate pattern of women's disadvantages. Every human society is characterized by gender based social relationship. The rearing of children by parents is also gender based. Children are taught to be male or female. Their roles are determined in the childhood, consequently their growth leads them in the different psychological pattern. It reflects the oppression and discrimination by the difference in division of labour i.e. household work and outside work. Such type of division of labour creates difference in status (as considered by society) in family, marriage, community, and society. Thus we find difference between male and female in every aspect. The gender identities are the conceptions we have of ourselves as beings male and female and the knowledge that one is a male or a female and the internalization of this fact into one's self–concept. (Lawman, 2004)

Gender relations are terms used to describe the relations between men and women based on biological differences that are socially and culturally created. For example, although the biological fact of having a child does not, in itself, make it impossible for women to have a job, she may be prevented by a number of factors determined by gender. Among them cultural norms restricting women to the home, stereotypes about 'suitable' jobs for women, or the lack of child care and family services are the few. In spite of the different degree and forms of gender inequality, the system is universal. Women have no common the multiple activities they are expected to carry out, while their 'official' sphere is the home and family. The extent of female disadvantage, and the forms it takes, may very but what remains constant is that women have seldom been more advantaged than men in many societies. An important aspect of gender based analysis is that it moves away from women's issues to considering structures that effect and are affected by both men and women (Bullock, 1994).

Stephen J. Bergman and Jonet's survey's states that on the women - man relationship, as old systems of relationship break down, new vision are called for. The historical roots of the male - female relationship are thousands of years old and are embedded in a patriarchal system which has shaped our institutions, our thinking, and the patterning of our relationships. As we work toward change, we must recognize the weight and depth of this history. Clinically as well as culturally we see many couples struggling with very similar relations impasses. It is essential for both women and men to move out of a sense of personal deficiency, pathology or blame - as we are all called on to participate in this cultural transformation of the dynamics of relationship. So far these have not been adequate opportunities to work together on these challenges. (Clinchy et. al 1998)

#### 2.1.2 Concept of Participation and People's Participation in Development

In its general meaning people's participation denotes to the involvement of a group of people beneficiaries in activities related with conservation or development. It has been a popular way of incorporating a particular group of people into a specific development or conservation program. It has, now, occupied a central place in development thinking and practice, that way it is now widely accepted that development cannot be sustainable and long lasting unless people's participation is made central to the development process.

According to Kohen and Uphoff (1977), participation includes people's involvement in decision making processes, in implementing programmes, their sharing in benefits of development programmes and their involvement in efforts to evaluate such programmes. Similarly Paul (1987) defines community participation as an active process by which beneficiary or client groups influence the direction and execution of a development project with a view of enhancing their well being in terms of increase, personal growth, self, reliance, in other values they cherish. (cited from Paudel, 2005)

From these definition also it becomes clear that people's participation stresses for the involvement of beneficiaries in every step of the development i.e. planning process, decision-making, implementation, benefit sharing, monitoring and evaluation. True participation must encompass the involvement of all kinds of groups, castes, ethnicity, religions and economic levels of the community. So this approach has been taken as the most important strategy to achieve the goals of sustainable development all over the world including Nepal. In fact the principal of sustainable development also demands an active and effective participation of all the concerned parties such as local people, locally active community-based organizations, GOs, NGOs, INGOs, etc.

#### 2.2 Review of Related Literatures

Gender and Development was not the concern for the development workers till 1970s. The whole issue of Women in Development (WAD) as it was called first came into the agenda in the early 1970s. According to Caroline Moser, the term "Women and Development" came from the women's committee of the Washington Chapter of Society for International Development (SIDA). (Pokharel) Christine Chinkin expressed in violence against women about the international legal response that despite the worldwide incidence of genderspecific violence, it is only very recently that it has become an issue of international legal concern. Rape and sexual abuse of women have long been part of international and internal armed conflict, but have not figured prominently in war crimes proceedings, while violence not associated with armed conflict has continued in diverse forms across all societies. Human rights guaranteed in the UN conventions (The International Convention on Civil and Political Rights and International Convention on Economic, Social and Cultural rights 1966). Such as those to right of life, to bodily integrity, and to be free from torture, cruel, and degrading treatment have not been interpreted to include such acts as domestic violence, rape-abortion of female fetuses female infanticide, female genital mutilation, forced sterilization, forced childbirth, and the numerous other forms in which violence against women and girls is manifested. (Lise, 1997).

Under the GATS agreement, the prospect offered is one of commercial companies buying and running essential services in poor countries. Governments will have little control over the cost to the service users, and there is little prospect of the profits being reinvested in the physical and social infrastructure of the country, (World Development Movement, 2002). Given existing gender power relations, the fact that poor households have to pay cash for basic health or education supplies can produce additional problems for women. Women are likely to have less access and control over cash, but their household and caring responsibilities means they have the most direct need for supplies to meet their families requirement. Women's access to clean water, for example is central to their responsibility for household reproduction What Malyneux called their practical gender interest if women lack cash which they need for health and education services, this will affect their strategic gender interest as well, (Molyneux, 1985). Yet, as stated above, in the rarified world of international trade and financial negotiations, gender issues are rarely taken into account. (Pearson, 2003).

Many rural mountain households in the HKH do not have access to adequate supplies of safe water yet. The use of polythene pipes and cement-lined storage systems, however, is increasing, and these new materials and system have alleviated the problem of water scarcity and reduced the drudgery for women to some extent. However, much more needs to be done, particularly in terms of ensuring that women and children do not have to travel long distances for water in the rural mountains and hills of the HKH. (Banskota and Chalise, 2000). The gender-related development index 2004 shows the gender-related development index is simply the HDI adjusted own wards for gender equality. The greater the value of GDI, the lower is the degree of gender disparity in human development. GDI in Nepal has score of 0.452% as against the HDI value of 0.47percent, this suggests that the depth of gender disparity in opportunities is not very great. The GDI for the rural areas (0.430%) is significantly lower than for the urban areas (0.562%), indicating a higher degree of gender inequality in

rural areas. Among the ecological belts, women in the mountains have a lower GDI value than those in the hills and the Terai. Similarly, among development regions, women in the eastern and western regions have higher GDI scores (0.475% and 0.477%) than those in the other development regions. The magnitude of gender inequality in human development indicators is more pronounced in the rural areas, especially in the mountains and far western region as indicated by their relatively lower GDI/HDI ratios. The GDI over the period 1996-2001 has increased to 0.452% in 2001 from 0.345% in 1996. (Nepal Human Development Report, 2004).

Planned change often requires specific attention to motivate staff members, especially when its realization requires a change in beliefs, values or attitudes. Changing people's tendency stereotype people of other gender is far from easy. The same applies to stereotypes of ethnic, racial, religious, or age group. Such fundamental change in the cultural dimension, however, is prerequisite to any significant and lasting change with regard to gender and diversity. Recruiting a larger number of women in male-dominated organization does not automatically change the way male staff value the work or leader styles of women nor does it stop men form making jokes about their female coffe colleagues. More needs to be done to realize changes in valuation and the way it is expressed. In other words changes in gender roles, valuation, access and control over resources, decision making and so on require well-planned action. (Gurung, 2001)

USAID Nepal has published "Women in Development Resources Manual Nepal" in 1990. The manual is collection of experience of 96 organizational governments, NGOs) and other activities, which are involving in the sector of moment development. Some of the activities which are implemented by many organizations for women empowerment. A source book for gender issues at the policy level in the water and sanitation sector is a result of research published by UNDP-World Bank in 1996. It presents ideas, methods and experiences concerning gender issues in policy level on water and sanitation sector. The source book includes various case studies of Nepal, India, Nepal, Pakistan and Brazil on women's participation in various activities. Women often benefit more directly then men from improved water and sanitation facilities and so they would have greater incentive to work for the success of project.

In his book procuring "Water: Foreign Aid and Rural Water Supply in Nepal" (Sharma, 2001) shows that poor people, particularly those belonging to Dalits, one discriminated against in claiming access to clean drinking water prodded by foreign donors. These poor people are in getting only the dirtier water off flow from the taps used by wealthier households) External intervention did not improve the situation. Rather, it helped the upper-caste household to legitimize their access to safe drinking water. In her article, Nepal: 'Women Rising', Subedi (1993) describes the various aspects of women development in Nepal and position of women in socio-economic fields. Similarly, women's access to natural resources and their participation in the management of resources are also covered. Problems faced by Nepali women like trafficking and AIDS are also elaborated.

The new water source provide potable water. Once the project was completed, men and children began to fetch water. They igaored changing the traditional gender division of labour with regard to water collection. Organizational systems within the community were strengthened as systems for collection of payment for water usage were also developed. The community worked out payment for the use of water and agreed that four families would be allowed to use the water free of charge because they could not afford to pay for it. Although the women assumed that they would have to pay for the water, the men paid for it since the job of collecting payments fell to a male member of the committee. Men spent more time at home during the project construction phase and later were able to market their skills in water system construction and maintenance. (Gurung, 2001) Some projects in Bangladesh and Kenya highlight the importance as well. Involving women who essentially manage water in the household level managed water system as well. Both projects recognize that women would not automatically involved and that a determined effort was necessary to ensure their participation. In Kenya, both men and women had gained self-confidence and had an increased respect for and acceptance of women in public decisionmaking. Strong participation of women resulted in the successful installation of hand pumps and latrines and a noticeable decline in diarrhea and other diseases (World Bank, 1993)

According to gender studies in the Himalayan Region, women were found to be sole, responsible for fetching water to both household and livestock. However, according to the UNDP Governance Survey most drinking water projects in rural areas are found to be implemented by the state agency with minimal consultation and participation by the rural community. Gender disparity in drinking water project was evident from only 30percent of women involved in some form of planning compared to 54% of men. Similarly in the sanitation project, 39% women and 56% men were involved (UNDP, 2002). Although Nepal is a signatory of the Dublin principles (1992) and where one of the four principles is that women play a central part in the provision, management and safeguarding of water (UNWWAP, 2001) most of the water resources development projects by pass them.(Bhadra et.al, 2002)

Gyawali (2001) argues that water is one aspect of the whole that is the Nepali society and her resources. Breaking the whole into components is akin to slicing an apple one ends up seeing only one cross-section and is left with the lingering doubt as to whether one has not missed a vital element that fell in some other cross-section used for introduction. In the words of Luitel (1992) participation today does not only mean citizen's participation to politics or administration (stated also in UN document) but also their involvement in

policy initiatives and actions relating to economic and social spheres of development. To put it more clearly, participation of the masses ensures domestic governance at the political level, equitable distribution of benefits, allocation of resources among the people at the economic level and equality of social relationships irrespective of the caste and creed at the social level as well.

Shrestha (1994) emphasizes on gender sensitive planning in the rural projects of Nepal that most of the projects in Nepal are gender insensitive. They are formulated on the basis of an assumption that an intervention program benefits equally to all without comprehensive information on the condition and position of women and men in the country and without analyzing specific situations and needs of women and men in specific areas, which overlooks the position of women entirely. In doing so, projects have had a negative effect on women by increasing their burden of labour by relegating them into sex stereotyped, labour - intensive work, as knitting and sewing, by ratifying unequal gender based distribution of labour, power and resources in the family and in the society which has contributed to the disempowerment of women and not development too.

Women contribute substantially to the economic resources of the family both by way of services rendered and wages earned. Yet their potential is not duly recognized and very little attention is paid to involve them directly with developmental activities and enable them to become more effective and productive (Usha Rao, 1985). Women are central to water sectoral development. Women are also central to the workforce when the informal sector is included in its definition. And women's water needs and work needs are very closely connected. Any long-term plan or thinking on the water sector must recognize this connection. (Mollinga, 2000).

With the help of the staff members of the Motipur SFDP, Bamu Thapa, women's group leader, was able to gather villagers together and discuss with

them the village's drinking water problems. Together, the villagers identified a nearly trial burning which was not being utilized and could be used as a new sources of drinking water. The villagers then formed a user's group of nine members who, with the help of SFDP staff members, attempted to tackle the problem. However, those were some poor people in the village who could not afford to manage their own fresh drinking water, so SFDP agreed that the budget for the drinking water project would be managed in collaboration with the people. The new bore holes are 4 inches wide and 180 meters deep, and water is conveyed to the taps through pipes. Water below 120 members is pure, so health condition of people in the ward has improved, as has vegetable production and money and time have both been saved. (Manushi, 1994).

Gender mainstreaming addresses gender in all cycle of programming, it beings by identifying the gender gaps within the sector, works to eliminate them through programs and evaluation stage. It works to achieving gender balance often call for better meeting the practical needs and interest of women and girls such as better access to water to reduce their workload and also strategic gender needs and interest to address inequalities such as including women in community decision making ((HMG/UNICEF, 1996). The involvement of women and girls is crucial to effective water and sanitation projects. Women and girls in developing countries bear most of the burden of carrying, using and protecting water (ibid)

The task of collecting water is directly related with women and girls. The nearest source may entail walking several kilometers in the dry season: paths to springs and other sources may be steep and treacherous; or women may have to wade through deep in mud to fetch clean water for family needs. Empowering poor rural women with adequate water rights means strengthening their access to water for both: the domestic and income generating uses. Better access to water improves women's health and income and liberates them from daily drudgery of fetching water (Koppen, 2001).

## CHAPTER III RESEARCH METHODS

#### 3.1 Research Design

Pertinent data about the study area was collected with the focus on the topic under study, that is, village setting, gender relations which existed previous to access to pariyojana area and that which exists now, the outside antics villagers, opportunities that they have had to augment their living conditions and various factors that have structured their gender relations. Emphasis was also laid on conditions of women in the past and present in Udiyachour Drinking Water Project area in relation to their work pattern and time saving. Furthermore, the chain reaction of water supply system in fulfilling women's practical needs and assisting in the fulfillment of strategic of strategic gender needs have been analyzed in depth. Thus, the nature of the study demands both exploratory as well as descriptive research design. The exploratory research design was used to understand various aspects of the problems or issues of this study of Aayojana area before the PUDWP implementation, while the descriptive research design used to describe the effects of Drinking Water Project on women's working pattern and reflective effects on their way of working as well as participation of social organizations.

## 3.2 Rationale of Selection of Study Area

The researcher was involved in Pelakot Udiyachour Drinking Water Project from its construction period. During the construction time, the researcher observed and encountered many problems regarding women involving in PUDWP management which inspired him to undertake an in depth research on women's participation in decision making for PUDWP management. Women form half of the population, but in many cases they have been excluded from the main stream of their development. In effect, rather them experiencing development they have experienced under development. The study was conducted in Pelakot VDC ward no 5 and 6 of Syangja district. The area is purposively sampled since it is an acquired access to piped water supply system named Pelakot Udoyachour Drinking Water Project after about 22 year of implearentation procedures. PUDWP was inaugurated its pipe water supply system in 2042 B.S. The PUDWP was constructed made by the support of Nepal government which was technically, institutionally and financially supportable to construct.

This study focuses on the women's participation during and after the Aayajana construction, their working pattern and the level of empowerment. Here in PUDWP area, prior to the access to piped water system, the average time spent in fetching water per put was 25 minutes. With piped water supply system, the activity was reduced 10 minutes. This PUDWP was directly run by Nepal government till 2052, than it was handed over to local water users. After the ownership of the local people, women were more participating in its management. Such an environment was contemplated an ideal one for the analysis of participation in terms of gender in actuality and the factors that hindered or facilitated the participation and the impact of such as activity.

#### **3.3** Sampling and Sample Size

The total of one hundred and fifty eight water user households constituted the study universe and household of were taken as sample unit for the study. Of the total households, 54 households were sampled purposively. The households were stratified on the basis of earning to allow representation from all categories crick–poor all castes lathing groups, religions of water user households. PUDWP area is a heterogeneous community in terms of ethnic settlements. The other factor considered was consumed in water collection prior to PUDWP. The rationale of the use of this method is to select the representative sample from the heterogeneous universe. For the purpose of this study, women water users (respondents) were selected form the project area. Every woman who was directly participated since the beginning of the project

was women motivators, tap-stand care-takers and women volunteers had also been included in the present study.

#### **3.4** Sources of Data and Data Collection Techniques

For the data to be reliable and authentic, qualitative and quantitative data from primary and secondary sources were collected using different data collection tools. The gender analytical framework (that is inside, and outside the dichotomy, GAD) was also incorporated.

#### 3.4.1 Household survey

Household survey was conducted to get basic socio-economic and other information from fifty-four households. Women (who were experienced of PUDWP since its construction period) members of family were taken as primary respondents of the household survey. Nevertheless less the same questionnaire was repeated ten cases with men as well. No salient differences in their answers were observed as such.

## 3.4.2 Interview

A questionnaire was designed for research interview. Both open and close ended questions were included in the research interview questionnaire. The questionnaire was pre-tested (dilated) and errors in questionnaire were corrected and brought into final shape. The interview was conducted to women and men water carriers, with the water users group and with the water users. Committee informal interview was conducted with community workers as well.

#### 3.4.3 Direct Observation

During the field survey, geo-physical condition of the project area, general approaches of the people, women activeness on water related cases in the informal meeting were also noted in the personal diary.

#### 3.4.4 Key Informants

Key informants were interviewed using piloted (pre-tested) questionnaire to collect primary information regarding the organization of structure and impact based process, the women's status before PUDWP and after PUDWP, health and sanitation role of women in PUDWP and social phenomena. To supplement data from the key informant, survey information were also collected by group discussions with the local people selected form different socio-economic groups in the study area.

#### 3.4.5 Secondary Data Collection

Secondary data was also collected and consulted form reports of the various local institutions, INGOs VDC office, District Drinking Water Office, District Development Committee (DDC) to obtain the data about plan and projects condition level in local level and national level. This information was intended to provide additional data.

#### **3.4.6 Data Processing and Analysis**

Data collected was processed and tabulated towards the completion of the study. Statistical package for the social science (SPSS), computer programs were used to process and analyze the quantifiable raw data gathered from field study. Although both qualitative and quantitative analysis was undertaken more emphasis has been laid on the qualitative aspect of if. Gender analysis tools and theoretical concept have also used for explanation of the data as well in the study.

#### **3.4.7 Problem of Data Collection**

This study is carried out in the small community of a Pelakot Udayachour Drinking Water Project (PUDWP) piped water system. Initially, the title of the dissertation was "A Sociological Appraisal of Drinking Water Project. A Case Study of Pelakot Udiyachour Khanepani Ayojana (PUDWP) Pelakot, Syangja District". But after getting close to the subject matter and its role in women empowerment and changing women's role in the village, the title of the dissertation was modified as "Impacts of Drinking Water Project on Rural Women: A Sociological Appraisal of Pelakot Udiyachour Khanepani Ayojana, Pelakot, Syangja". In this process, the comments and suggestions of the dissertation supervisor was also incorporated.

The researcher himself is a user of this PUDWP system. Initially, the respondents of PUDWP were supposing to new plan and project was going to be lunched for the improvement of PUDWP system because of reviewing of the Aayojana. Furthermore, due to the poor physical condition to PUDWP system, consumer were inspecting for maintaining ace pressure to the concerned authority as well as other NGOs and NGOs through the researcher. The villagers were not able to comprehend that the study was being undertaken for M.A thesis. As a consequence, the members of water users committee and water users group as well, poured down several grievance against each other and against the functioning of the scheme and watter to solve problem retargeting them.

#### **CHAPTER IV**

## INTRODUCTION TO STUDY AREA AND THE RESPONDENTS

### 4.1 Physical Setting of the Study Area

Pelakot VDC, in the Syangja district is located in Gandaki zone, Western Development Region of Nepal. Pelakot V.D.C can be compared with mid Himalayan range of Nepal. The climate pattern of this V.D.C is tropical and sub-tropical types, in summer temperature is an average 28<sup>°</sup>c and in winter is 12<sup>°</sup>c. This V.D.C receives summer monsoon rainfall from Jesth to Ashoj which gives support to all agricultural activities like cultivate the crops as well as fodder to the reared animals. PUDWP (Pelakot Udiyachour Drinking Water Project) area is 30 km far from district headquarter of Syangja district. Aadhikhola River is the major problem to connect road network from the Siddhartha highway which is 500 meter far from the ward no 6 of Pelakot VDC. This PUDWP is covering the water supply to ward no 5 and 6 of this VDC which includes the settlements like Udiyachour, Khanidanda and Sikhre villages. Udiyachour is a transit point for these localities. The altitude of this V.D.C is 540 to 1600 meter from the sea level.

The major river of this V.D.C is Aadhikhola which is generally following from north east to south west of V.D.C and other streams are the tributaries of this river i.e. Faudikhola, Lidinkhola, Tarikhola, Mankekhola. Main villages having major water problem are Ramche, Kapurdi, Daregaunda and Netavanjyang. The people of these area still facing water fetching problem day to day. Mostly male members of family are out from the village for their seasonal earning but women who are the permanent dweller of the village are mostly facing the water problem. According to water resources committee Pelokot Syangja 2059 these are 252 water resources in the V.D.C that can be used for drinking water purpose but at present about 20 percent of water source are utilized with the support of Nepal government, NGO and INGOs.

#### 4.2 Cultural Setting

Pelakot V.D.C has mixed types of castes from caste/ethnicity point of view. People of Brahmin, Magar, Sarki, B.K, Nepali, Damai, Gurung, etc. community are living in the different wards. Brahmin is the major populated caste of this PUDWP area because 68.5 percent of population is them similarly G.T 7.4, Biswokarma 22.2 and Sarki only 1.9 percent population are living in this Aayojana area.

This area is a Hindu dominant area. About 98 percent people are Hindus and 2 percent are Christian. People of this PUDWP area celebrate all types of Hindu religious festivals. In every Ekadasi Parva and major Sanskranti, they go to the river to take a holy dip, visiting temple and offering *Tika* and donation (Dakshina) to girls and respected guests. To perform religious activities in this PUDWP area, there is one *Bhajan Kritan Mandali*. Most of members are from ward no 6 and some of them are from 5. This Mandali is invited during the religious as well as social festival celebrating time. Dancing in *panchhe baja* from the Brahmin society is not open as like dancing in Kritan. Young generation is tying to oppose this restriction but in present years panchhe baja system is being vanished. Panchhe baja group also is in this PUDWP area where they live in ward no 5. The holy places of this PUDWP area are local temple which were constructed by local people of different area (wards) in Pelakot V.D.C almost all wards have Bhagawati temple because they performs. Devibhagawat puran during Dahain festival (9 days). In the day of Dashain tika, people, except the Dalit, visit to receive Tika and Prasad from the temple by *Pandit* as well as elder parents. Ward temple is the center point of doing all types of religious activities of ward people.

## 4.3 Socio-demographic Profile of Respondent

Pelakot Audiachour Drinking Water Project PUDWP area is covering the whole ward no 6 and about half area of ward no 5 of Pelakot V.D.C. According

to 2058 census, these were 1140 households in Pelakot V.D.C. In ward no 6 these were 110 household and ward no 5 had 126. The total population in Pelakot V.D.C was 7299 where male population is 3777 (51.75 percent) and female is 3522 (48.25 percent). An average household population is 640 which is quite higher then national household rate 5.6% and 5.3% district average household rate. The socio demographic profile of respondents is given below in detail.

#### 4.3.1 Caste and Ethnicity of the Respondents

The area of PUDWP consists of 168 households with the total population 1080. This population is a mixture of Brahman and Dalits. Like the whole population, the selected samples also exhibit the same feature. The caste and ethnicity distribution of the respondents is shown table in the 4.1.

Caste/Ethnicity	No. of Household	Percent
Brahmin	37	68.5
В.К	12	22.2
G.T.	4	7.4
Nepali	1	1.9
Total	54	100
	Brahmin B.K G.T. Nepali	Brahmin37B.K12G.T.4Nepali1

 Table 4.1 Caste and Ethnicity of the Respondents

Source: Field Survey, 2007

As the table 4.1 shows, 68.5 percent of the respondents were Brahmins followed by 22.2 percent of the B.Ks. G.T. and Nepali form 7.4 percent and 1.9 percent of the respondents respectively. From this it is clear that Brahmans are dominant in the study area. Sometimes, this dominancy is found to be characterizing some severe cases of caste-opposition and caste based discrimination. Pelakot had evidenced such cases in the past.

## 4.3.2 Religion of the Respondents

Pelakot Udiyachour Drinking Water Project area is mainly inhabited by Hindu people. The following table 4.2 shows the religious composition of the respondents.

S.No.	Religion	No. of Households	Percent
1	Hindu	53	98.1
2	Christian	1	1.9
	Total	54	100

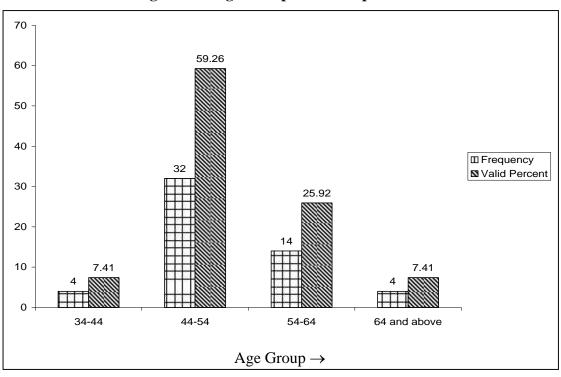
**Table 4.2 Religion of the Respondents** 

Source: Field Survey, 2007

The data in the table 4.2 reveal that 98.1 percent of the respondents of this study were Hindus and only 1.9 percent people were Christian. This shows the prevalence of Hindus as dominant religious community in the study area. In fact, this more or less characterizes the religious composition of the whole Pelakot VDC.

## 4.3.3 Age of the Household Members of the Respondents

The respondents of this research were women at the age of 34 years and above because present research is analyzing the effects of PUDWP on women's working pattern and their social empowerment. The figure 4.1 projects the age of the household members.



**Figure 4.1: Age Group of the Respondents** 

Source: Field Survey, 2007

As shown in the figure 4.1 out of the total respondents about 3/4<sup>th</sup> i.e. 59.26 percent were belonged to the age group 44-54. Similarly, 25.92 percent of them belonged to 54-64 age group. The respondents from 34-44 and 64 plus age groups were 7.41 percent each. All of these women were the participants of the construction of PUDWP.

## **4.3.4** Education of the Respondents

The literacy rate of this PUDWP area is good. This area is academically well because of the availability of School which are Saraswati Secondary School now a higher secondary school which was established in 2032 B.S., Jeewan Jyoti Secondary Boarding School established in 2043 B.S. is also playing remarkable role to make the people educated in local area. Because of these schools, people can go to college nearby i.e. Waling Multiple Campus, situated at Waling Municipality which is about 6 km far from PUDWP area.

Education	Frequency	Percent
Illiterate	5	9.26
Literate	32	59.26
Primary Level	3	5.56
Lower secondary	2	3.70
Below SLC	8	14.81
SLC Passed	3	5.56
Intermediate or above	1	1.85
Total	60	100
		g E: 11g 2007

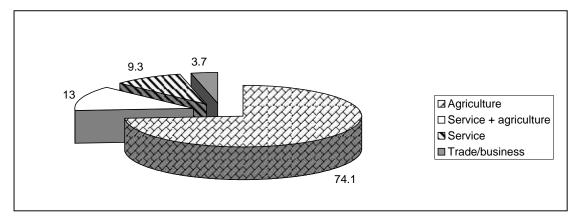
**Table 4.3 Educational Status of the Respondents** 

Source: Field Survey, 2007

As we see in the above table 4.3, more than a half of the respondents 59.26 percent were literate only while 7.41 percent of them were having educational qualification of SLC passed or more which is considerable in the context of a rural population of a rural setting in the past. High literacy rate of women owes much to the adult literacy programmes run by Nepalese government as well as different NGOs.

## 4.3.5 Occupation of the Respondents

Regarding the occupation and income source, the respondents of this study have given diversified types of opinions which have been shown in the figure 4.2.





Source: Field Survey, 2007

As shown in the above figure 4.2, about 74 percent people were involved agriculture. Out of 54 main respondents, 5 people were in service sector that is 9.3 percent, 3.7 percent people were in business sector in local market and 13 percent people were found both occupation holder service and agriculture jointly. This clearly suggests that Udiyachaur is primarily an agriculture based society like most of the Nepalese societies.

#### 4.3.6 Source of Water before PUDWP

It has already been explained in introductory unit about the water sources of the Pelakot V.D.C ward no 5 and 6 areas where PUDWP is running after 2042 B.S. The researcher wished to understand the source from which these women used to get water before the PUDWP. The result of this activity has been illustrated in the table 4.4.

Source of Water	rces of water of the Respond Frequency	Percent
Well/spring	49	90.7
Pond	3	5.6
Stone tap	1	1.9
Rain water harvesting	1	1.9
Total	54	100

Table 4.4 Sources of Water of the Respondents before PUDWP

Source: Field Survey, 2007

According to the table 4.4, for 90.7 percent of the respondents, well i.e. kuwa was the dominant source of water. Besides they used to collect water from pond, stone tap and rain water. To sum up, the main water sources of this area before the PUDWP were stone taps, well spring, canal and rain water harvesting system during in summer time. People of this area were facing hard problem to fulfill their daily water needs. Mostly the women were in trouble of water. While collecting water they had to go to water ponds or water sources early in the morning which was very risky for them from the attack of wild animals as well as other social enemies.

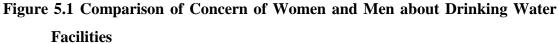
#### **CHAPTER V**

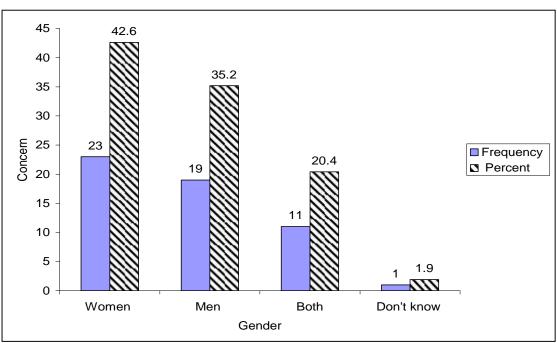
## WOMEN'S PARTICIPATION IN PUDWP'S ACTIVITIES

Stakeholders can participate in development undertakings in a number of ways. As stakeholders of the PUDWP, women of Pelakot, Udiyachaur village have participated in the activities of this drinking water project in various ways during its construction. The main ways in which the women of Udiyachaur participated in the PUDWP's activities are discussed below:

## 5.1 Comparison of Concern of Women and Men about Drinking Water Facilities

Water is always an issue of concern for all people since it is one the basic needs for life. The concern shown by women was very much encouraging right from the need assessment of this project. Their deep concern about this project was one of the major factors behind the success of this project as interpreted by one of the key informants concerned with the construction committee of the project. The following figure speaks more about it.





Source: Field Survey, 2007

As shown in the figure 5.1, 42.6 percent of the respondents felt women were and are more concerned with the construction of the drinking water project while 35.2 percent felt men as more concerned and 20.4 percent believed that both men and women were concerned about drinking water project. These data clearly show that women have more concern about drinking water facilities than that of men. This is due to the fact that like in other Nepalese societies, in Udiyachaur also women are allocated with the responsibility of collecting drinking water and previously the major water sources for them were located at far off places from their locality.

#### 5.2 Involvement of Women during the Construction of the Project

As encouraged by their concern about easier access to water, women were very actively engaged in the construction of the project, one way there self concern encouraged them to participate in drinking water project activities. The given table shows some data regarding this matter.

 Table 5.1 Possession of the Feeling of Self-Encouragement by Women to

 Participate in the PUDWP's Activities

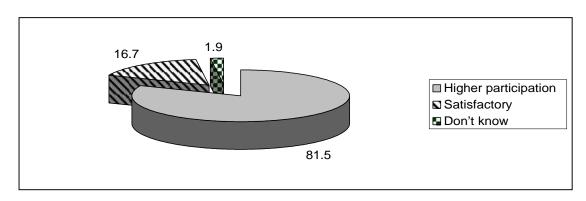
Category	Frequency	Percent
Yes	42	77.8
No	5	9.3
Don't know	7	13.0
Total	54	100.0

Source: Field Survey, 2007

As demonstrated in the above table 5.1, a large portion i.e. 77.8 percent of the respondent women felt that they were encouraged themselves to participate actively in PUDWP activities. This also reflects the general scenario of the most of the rural women. This is because they have been the one who have a direct relationship with water-fetching activities in day to day life. Due to a long distance of the water source, these women have been facing a great work

burden. Moreover to this, since the women of Udiyachaur were self encouraged to participate in the PUDWP activities, it was natural for them to perceive each others' contribution of higher one. The given figure shows important data about it.

Figure 5.2 Level of Participation of Women during the Construction of the PUDWP



Source: Field Survey, 2007

As shown in the figure 5.2, 81.5 percent of the respondents thought that there was a very high level of participation of women during the construction of the PUDWP. While 16.7 percent viewed it a satisfactory one from their side. This also clearly shows the level of desperation of having an easier access to drinking water facility for these women. Definitely they seemed to lessen the workload on them regarding the management of water for household uses.

## 5.3 Participation of Women after the Completion of Project Construction

The type of activism that women showed during the construction of PUDWP remained almost the same even after the completion of the project as quoted by the president of PUDWP construction committee. The researcher also noted such activism in the part of women in PUDWP viewed. The way women visualized each other's construction in PUDWP after its construction is shown in the table given below:

Category	Frequency	Percent
Very Active	49	90.7
Satisfactory	2	3.7
Poor	2	3.7
No response	1	1.9
Total	54	100.0

Table 5.2 Level of Participation of Women after the Construction of the PUDWP

Source: Field Survey, 2007

As the table 5.2 demonstrates that a large proportion of the women respondents i.e. 90.7 percent viewed each other's involvement in PUDWP after its construction as very active only while 3.7 percent of them viewed it satisfactory. Actually this contribution of women after the project construction was centered more on its maintenance and discussion made about the durability of the project. Their perception was further vindicated by one of the key informants who explained that women have been more active than in the past to make project durable.

## 5.4 Involvement of Women in Operation and Maintenance

Operation and maintenance is one of the important activities of any drinking water program. The longevity of any project rests on the level of commitment shown by its stakeholders in its promotion and maintenance. Women of Udiyachaur have played extremely important role for the processes of operation and maintenance of this project. The researcher also recorded some cases supporting this fact during field observation. The following figure 5.3 shows the real scenario of women's participation in the operation and maintenance of this drinking water project.

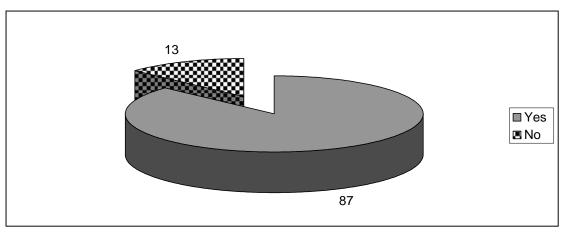


Figure 5.3 Involvement of Women in Operation and Maintenance

Source: Field Survey, 2007

After the construction of the PUDWP, 87 percent of the women respondents said that they are continuously involved in the operation and maintenance of the project after its successful completion, while 13 percent of them expressed that they were not doing so currently. Higher involvement of women in the operation and maintenance may be due to the presence of fewer number of men in the village since a large number of them are now in the foreign employment. This scenario is now becoming a characteristic feature of most of the Nepalese villages.

# CHAPTER VI ROLE OF PUDWP IN CHANGING WOMEN'S WORKING PATTERN

The working pattern of the women in the households of Udiyachaur is not much different from that of most of the Nepalese rural women. Most of their time is spent on domestic affairs. In the past, fetching water from distant source was a familiar and one of most difficult household tasks for rural women. They had to spend a long time for fetching water in Udiyachaur too. But once the PUDWP was built, some significant changes have occurred in the working pattern of these women. This chapter describes the ways PUDWP is changing these women's working pattern.

### 6.1 Source of Collecting Water before the PUDWP's Completion

As mentioned before, collecting water for the household use was quite difficult before the construction of the project in Udiyachaur. They had to walk for a long distance for this purpose. So, significant time was spent on it. It used to place them a very heavy and difficult workload to be accomplished. The following figure 6.1 shows the source of collecting water before the project construction.

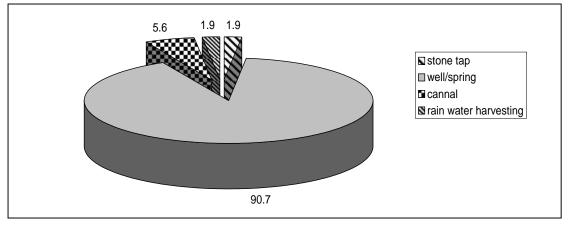


Figure: 6.1 Source of Collecting Water before the PUDWP's Completion

Source: Field Survey, 2007

As we see on the above figure 6.1, a large portion of the respondents *i.e.* 90.7 percent had to use spring/well for collecting water for drinking and other household uses. Besides this, other main source for the collection of drinking water was canal built for the irrigation purpose for 5.6 percent of the respondents, stone tap and rain water for 1.9 percent of the respondents' households. This revals the real scenario of most of the Nepalese rural areas of today also.

#### 6.2 Time Spent for Collecting Water before the Project Construction

Since women had to visit spring or well for collecting water before the project construction, naturally it required these women to allocate a longer time for fetching water. This was because these water sources were far from to their houses. The given table shows more information on it.

Category	Frequency	Percent
0-10 minutes	6	11.1
10-20 minutes	2	3.7
20-30 minutes	24	44.4
30 minutes above	22	40.8
Total	54	100.0

 Table 6.1 Time Spent for Collecting Water before the Project Construction

Source: Field Survey, 2007

As the table 6.1 shows that 44.4 percent of the women respondents had to spent more than 20-30 minutes for fetching water while 40.8 percent had to spent more than 30 minutes, 11.1 percent had to use 10 minutes or less and 3.7 percent had to spent10-20 minutes for collecting water. This shows the real problem that these women faced before the project construction in which they had an excessive work related to fetching. In fact, this scenario still prevails in many rural areas of our country to as well as a bitter truth.

## 6.3 Working Pattern of Women Related to Drinking Water Supply after PUDWP's Construction

Obviously, PUDWP has brought significant changes in the working pattern of the women of Udiyachaur in terms of managing water for household purpose and others. In a way, now they are tasting the fruit of their honest labour and contribution they did in the process of the project construction. The major changes brought by the project in women's working pattern in the village have been described as follows:

#### 6.3.1 Easy Access to Water Sources

After PUDWP's construction, the women of Udiyachaur are quite happy due to easy supply of water on or near their courtyard. This has eased the basic processes of bathing to general irrigation of the kitchen garden. The availability of water near the courtyard has definitely saved their time allocated for managing water. The given table shows the way the time of these women to fetch water has now been saved.

Category	Frequency	Percent
0-5 minutes	43	79.6
6-10 minutes	11	20.4
Total	54	100.0

 Table 6.2 Time Spent for Collecting Water after the Project Construction

Source: Field Survey, 2007

As the table 6.2 explains a vast majority of women i.e. 79.6 percent of the respondents have to spend only about 5 minutes to fetch water for domestic purpose and 20.4 percent of them also need not spend more than 10 minutes for this purpose. From this it is clear that the work load of these women is greatly lessened after the PUDWP's construction. As a result, women are gradually shifting towards some productive and creative activities. This has added a new

dimension towards the empowerment of these rural women. This is because now they are more involved in what called the main way of empowering and raising the status of rural women *i.e.* IGAs.

### 6.3.2 Use of Water for Kitchen Gardening

Since the project has brought water supply to an easily accessible place, now women are starting make more benefits from this. Not only for household and daily uses but they are now able to use this water for other productive purposes such as irrigating vegetables in the farm and kitchen garden. More regarding this is shown in the table given below.

Category	Frequency	Percent
Use water to irrigate vegetables farm	29	53.7
Use water for kitchen garden	23	42.6
No	2	3.7
Total	54	100.0

Table 6.3 Use of Water except in Household Use

Source: Field Survey, 2007

As shown in the above table 6.3, now 53.7 percent of the respondent women have started seasonal and off-seasonal vegetable farming near their households after the project construction. For this purpose this project has been providing required amount of water. From this they have been able to generate certain income at the household level. This practice was less common when there was difficulty of managing drinking water in the past. Likewise, 42.6 percent of the respondent women use this water for kitchen gardening. This has aided a lot of boosting of the self supportiveness of the family to some extent. Some of them have also been able to make economic profit from vegetable farming. This has lessened their economic dependency on their husbands. This way they are getting empowered economically.

## 6.4 Major Changes in Women's Working Pattern Related to Drinking Water Supply

There has been noticed a significant and considerable changes in working pattern of women related to drinking water supply after the PUDWP construction. Some significant and major changes have been discussed below.

### 6.4.1 Time Saving

As illustrated in the subtopic 6.2, most of the women in the village had to allocate a long time for fetching (collecting) water. As a result, women had to bear extra burden related to drinking water supply. Similarly as shown in the table 6.3, there has been relatively easier for women for collecting water as they now have to invest or allocate quite less time for this purpose after the project's construction. The data in the table 6.4 shows more on the respondent women's attitude towards time saving resulted due to PUDWP's construction.

Category	Frequency	Percent
Yes	51	94.4
No	3	5.6
Total	54	100.0

Table 6.4 PUDWP has Saved Time spent on Collecting Water

Source: Field Survey, 2007

As illustrated by the data of the table 6.4, 94.4 percent women respondents felt that the project construction has saved a large part of this time invested in fetching water. As a result, now women are gradually managing to engage themselves in more activities related to their empowerment. Due to their changed focus, one can see early symptoms of improvement in the living standard of not only women but also the whole families.

### 6.4.2 Convenience

The PUDWP's construction has not only saved time for collecting water for these women of Udiyachaur but also has made their difficult task of managing water for household uses a convenient one. The figure 6.2 shows some views of the respondents related to this issue.

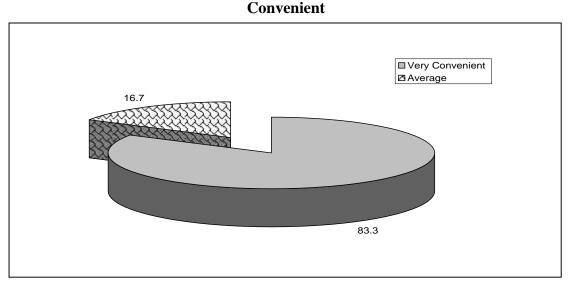


Figure 6.2 PUDWP has Made the Collection of Water for Household Use

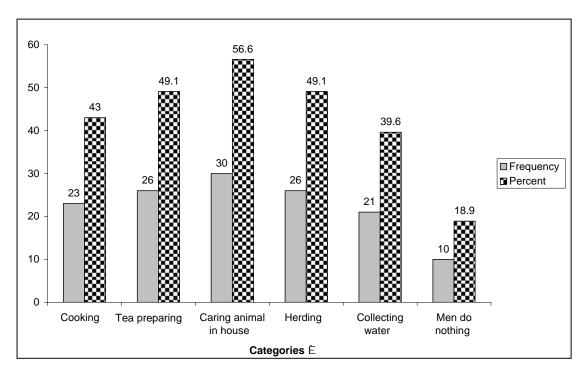
As exhibited by the data of the figure 6.2, a large portion of the respondents *i.e.* 83.3 percent have felt convenience in fetching water after the PUDWP's construction. Now they no longer need to carry the water pots in their back from far-off places. Due to this, surely their work burden is lessened which may have some indirect implications in other creative tasks for the betterment of this and their families' life.

## 6.4.3 Change in Household Division of Labour

Nepalese society is traditionally male dominated. As a result of this men are ranked higher to women and the activities that men perform are considered to be more superior to women. This scenario prevails in the household sector also in the society of Pelakot. Udiyachour is not devoid of such salient features of Nepalese society so far. But after the PUDWP's construction, some significant changes have been recorded regarding the household division of labour among men and women. The given figure 6.3 shows more on this.

Source: Field Survey, 2007

Figure 6.3: Household Labour done by Men after the PUDWP's Construction



Source: Field Survey, 2007

As shown in the above figure 6.3, not only collecting water but local men also have started to engage in other domestic activities too. As we see 56 percent of them take care of domestic animals and 49.1 percent of them prepared tea, 43.4 percent of them cook food for the household, 39.6 percent of them care children. These figures reflect the version of the women respondents. They have clearly indicated that after PUDWP's construction men have stated to contribute in the household activities too like looking, preparing tea, caring domestic animals and caring children which fall under the traditional category of activities to be done by women. From this we can say that PUDWP has been playing an important role in strengthening the bond between men and women by encouraging them to share the domestic tasks between them.

As the figure 6.4 clearly reveals that in Udiyachaur, collecting water is no more women's duty only as men collect water in 39.6 percent of the respondents' households. The purposes for which men collect water and its comparison to the purpose for which women collect water have been presented in the figure below.

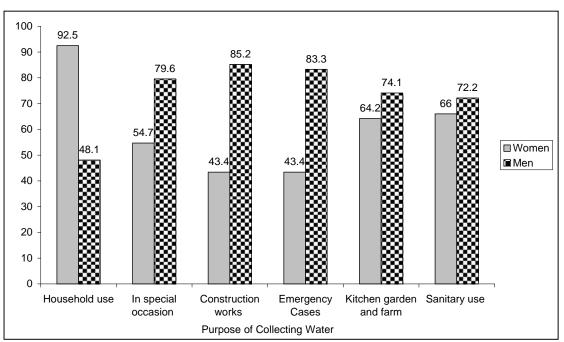


Figure 6.4: Purpose of Collecting Water by Men and Women

Source: Field Survey, 2007

The figure 6.4 is evident that the purposes for which men collect water are much similar to those done by women though collecting water is considered to be one of the a must household activity for these women. According to this figure, the main purposes of collecting water in the study area includes for household use, for special occasion, construction, emergency cases, kitchen gardening and farm use and sanitary use. Among these purposes, there seems to be no vast differences but except for household use, for other purposes, men contribute more in collecting water. As demonstrated by the figure, the main purpose of collecting water by men is for construction works followed by for emergency cases. Likewise, for women the main purpose for doing so is for household use followed by for sanitary use.

#### **CHAPTER VII**

### **ROLE OF THE PUDWP IN WOMEN EMPOERMENT**

PUDWP has proved to be very helpful to empower the women in Udiyachaur in Pelakot VDC, Syangja as quoted by one of the key informants. This chapter focuses on the ways PUDWP has played its role in women empowerment in this village.

#### 7.1 Use of Saved Time by Women

One of the most the significant contribution of this drinking water supply project on women's lives has been the duration of time saved that they had to allocate for fetching water. As a result now they have been able to involve themselves in various creative activities. Such kinds of involvement of these women have been adding a new dimension to women empowerment. The following table shows the pattern in which these women have been using the time saved for fetching water after the construction of the PUDWP.

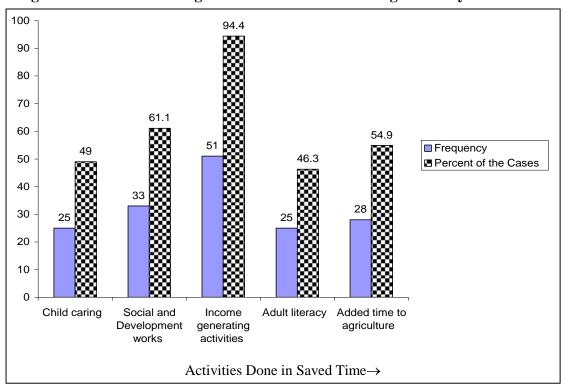


Figure 7.1 Pattern of Using Saved Time from Collecting Water by the Women

Source: Field Survey, 2007

\* Multiple response type question.

As shown in the above figure 7.1, 94.4 percent of the respondents have been able to add more time in IGAs from both agricultural and non-agricultural sectors. From this, they are not only fulfilling their daily need of vegetable, but also are making some economic gains by selling vegetables. Likewise, 61.1 percent of the respondents have been able to invest the saved time for social and development related works in the society. Similarly, 54.9 of them are now able to append more time to agriculture. This has been very helpful for the farm-based families of the study area. In the same way, 49 percent of the respondents have been able to use saved time for adult literacy classes. As a result of this, their knowledge and awareness level has increased and it also has shown other different types of positive impacts on the social life in Udiyachaur.

### 7.2 Major Dimensions of Women's Empowerment

The reality of women's empowerment brought up in Udiyachaur after the PUDWP's construction can be described on the basis of following divisions.

#### 7.2.1 Involvement in Income-Generation

As shown in the table 7.1, 94.4 percent of the respondents have been able to generate same income by using the saved time from fetching water. Most of these women have been using that saved time in IGAs related to agriculture. The researcher tried to investigate how many of the respondents have now started kitchen gardening after the easy availability of water. The following table shows then data produced from this investigation.

Category	Frequency	Percent
Yes	49	90.7
No	5	9.3
Total	54	100.0

Source: Field Survey, 2007

As the table 7.1 demonstrates that 90.7 percent of the respondents practiced kitchen gardening. From the kitchen garden, these women are now producing some vegetables and cash crops around home by using the saved time after the construction of the PUDWP. This has proved to be a quite beneficial IGA for these women besides fulfilling the family need of vegetables. The income that they have been making from such activity has been a supplement to support the household economy.

#### 7.2.2 Leadership Development

Another very important and significant contribution of PUDWP has been the leadership development among women as explained by one of the keyinformants concerned with PUDWP managing committee. Their regular participation in meeting in the course of construction and management of PUDWP has made them more conscious and aware about various issues related to leadership development. The following table shows the women respondents' view regarding this issue.

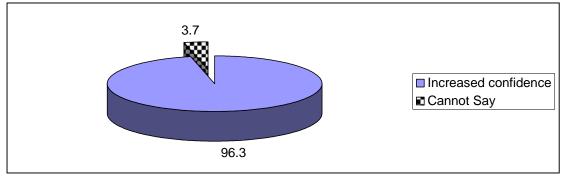


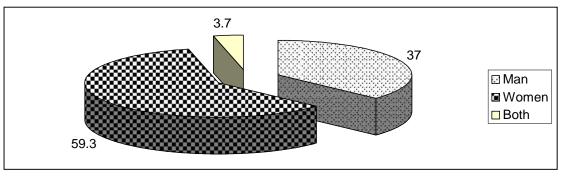
Figure 7.2 Increase in Confidence Level among Respondent Women

The above table shows the view of respondents regarding the confidence development in them. 96.3 percent of them hold that their continuous involvement in the management of PUDWP has contributed to lift their confidence level. As a result, most of them felt that they now can express what

Source: Field Survey, 2007

they feel regarding various issues, socio-cultural change, development, women empowerment, etc. In the past when such incident occurred, they used to remain silent as if they had no expressability. Now they easily give their opinion when they are asked. Not only this now whenever any meeting or gathering is held in the society, women's representation remains encouraging.

Figure 7.3 Family Members who Attend Social Gatherings and Meetings



Source: Field Survey, 2007

Figure 7.3 demonstrates that from the household of 59.3 percent of the respondents, women represent in such social meetings and gatherings while from 37 percent of the households of respondents, men represent in such occasions. These data clearly reveal that women's attendance in social meeting and gathering is quite appreciable. As informed by one of the key-informants, now most of the women do not hesitate to express their views in such occasions. This also highlights the leadership development among women of Udiyachaur which owes largely to PUDWP.

#### 7.2.3 Involvement in Decision-Making

Along with leadership development, involvement in decision making in the family and the society has been another dimension of women empowerment in Udiyachaur after the PUDWP'S construction. In most of the phases of PUDWP's construction women were involved actively in new decision-making regarding the project. The table 7.2 presents some useful information on the way women participated in new decision-making related to the PUDWP during its construction.

Category	Frequency	Percent
Yes	50	92.6
No	3	5.6
Don't know	1	1.9
Total	54	100.0

Table 7.2 Family Members who Attend Social Gatherings and Meetings

Source: Field Survey, 2007

The table 7.2 shows that 92.6 percent of the women respondents involved in decision making process in various phases of the PUDWP's construction. It means same women participated in earlier stages while some in the middle and others in the latter stages of the project construction. Moreover, 14 of the women respondents said that they were the members in the management committee. This also clarifies their involvement in decision-making related to PUDWP's activities. This trend of them of participating on other various activities related to social welfare and development is going on high today as well. Now women's participation in decision making in such activities is considered to be a must in Udiyachaur.

## 7.2.4 Development of Participatory Attitude

With the construction of the PUDWP, the participatory attitude of women is also enhancing. Their interest of participating in development activities is also in the higher side. Table 7.3 shows more about it.

Category	Frequency	Percent
Yes	42	77.8
No	5	9.3
Don't know	7	13.0
Total	54	100.0

Table 7.3 Women	Wish to Pa	rticipate in	Coming I	Development	Projects Too
I abic 7.5 Wollen		in theipate m	Coming I	Jevelopment	I TOJECIS I OU

Source: Field Survey, 2007

As shown in the above table, 77.8 percent of the women have a strong desire of participating in development activities in the future too while 13 percent of them didn't know what they felt, which indicates that still there are some traces of women's characteristic of hesitation among some of the women respondents though they say that their express ability has increased. 9.3 percent of them didn't like to participate in such activities in future. Probably they might have got tired while contributing to the PUDWP.

#### 7.2.5 Participation in Development Activities

According to table 7.4, 88.9 percent of the respondent women have been able to use the saved time from collecting water after the PUDWP's construction. The researcher also attempted to investigate the ways these women are now contributing to development activities in the village after the PUDWP's construction. The result of this attempt has been shown below.

Category	Frequency	Percent
Forest management	48	88.9
School management	2	3.7
Others	4	7.4
Total	54	100

Table 7.4 Involvement of Women in Development Activities due to Saved Time

Source: Field Survey, 2007

The table shows that currently 48 percent of the respondents were involved in forest management while 3.7 percent of them were engaged in school management. Similarly, 7.4 percent of them were participating in other kinds of development activities. Here the others category of development activities includes irrigation management, sanitation programme, road construction, farmland management, etc.

#### **CHAPTER VIII**

## SUMMARY, CONCLUSION AND RECOMENDATION

#### 8.1 Summary

This study was carried out among the users of Pelakot Udiyachour Khanepani Aayoujana in Pelakot VDC, Syangja district with the general objective of exploring understanding and the major impacts of PUDWP among the women and the society in the selected area of Pelakot, Syangja. But it had three-fold specific objectives stated as follows:

- 1. To identify the women's participation in PUDWP's activities.
- 2. To analyze the role of PUDWP in changing women's working pattern in the daily life.
- 3. To study the contribution of PUDWP in women empowerment in the study area.

Pelakot is a Brahmin dominated society, though these are other castes i.e. Bishowokarma, Gharti Magar, Nepali and Thapa, but they speak Nepali language. But the Thapa (magar) communicate in their native dialect.

Gender relations in PUDWP area are one where women do not enjoy the same status as compared to males. Thus being a community where educational status is very low and dominated by males, male-domination is pronounced in all arena of social and economic life. Gender division of labour assigns all or most of the tasks related to household chores exclusively on the shoulders of the women, though this is not pronounced in the majority of the poorest households. Even though women are occupied in agriculture all year round, the males mostly do the purchase of seeds and fertilizers. Likewise, the authority to sell the agricultural products is done exclusively by the males. For the women of the very poor and poor category, agriculture is subsistence farming and most of them have to work as wage labours to make their ends meet. In terms of livestock rearing, it is women themselves who have to look after them. Men, on the other hand, are responsible for veterinary services when required and deal with buying and selling.

After long study of Nepal Government, Department of Drinking Water Supply and Sanitation was lunched this PUDWP during the fiscal year 2039/40 BS, and project was successfully completed on 2040/41 B.S. It was a government project so financial part of this project was contributed by Nepal government. Before PUDWP, the people of that area were facing greater problem, the sources of water were very small. The community people formed a construction committee and actively participated during construction phase. They dug pipeline, transported materials, collected local materials, decided tap locations and supported for maintenance. This project was at hand over to the local committee on 2055/056 B.S. Then the role of the people participation as well as women participation become more meaningful in project concerned. However, women participation was limited during construction period and they weren't involved in decision making process. It is obvious that even in household or family matters, men are the main decision makers. However, time has changed and women participation in decision making has been increasing. Women of PUDWP work harder then men after 2055 B.S., when the PUDWP was fully handover to the local committee by government.

These are nine executive members including three women in PUDWP ommittee. The committee is responsible for management of water supply system. They have developed a constitution of their our. The committee appoints a caretaker. The water user committee also implemented water tariff on monthly basis. The collected tariff will be used in salary of caretaker. Nevertheless, PUDWP area has benefited from the project installation, women's work burden has lessened. They have time to concentrate more on children and other household task that used to be neglected, especially regarding cleanliness. During the winter season they are more able to attending in meeting of PUDWP. Some have started adult literacy classes and some have

53

started liquor selling business. Above all, women are increasingly being encouraged to attend as the household members and the community realized it to be beneficial.

After the commissioning of the PUDWP, majority of the women have utilized their surplus time in income generation activities. Before the PUDWP they used to fetch water from Kuwas, Kulo and Khola which was more time consuming work. Because of the increase in these income generation activities, most of the women are now able to attend adult literacy class conducted through education office and other NGOs from time to time.

Changes have come about within the household too, with women contributing to household income, their role in decision making has increased significantly. This is more obvious in nuclear families than in joint families. Their work burden has begun to be shared, especially those dealing with livestock. In the PUDWP area a cooperative sanstha named "*Bhagawati Dugdha Utapadan Sahakari Sanstha*" created a mass awareness to the women. Large scale livestock farming have begun where men take on certain chores like cleaning the stall, grazing, etc. regularly as their responsibility. But most of all, women are now relatively more active in meetings. Although less than men, these were a significant number of women and all of them were eager to become members of the cooperative. Their logic is that being a member of any group is holding a post which confers their status.

At present there are three women members in the PUDWP's management committee. These three women participants in the committee meeting are providing suggestions for decision making. However, they are not in decision making position. They inform other women about water management decisions. Women are overloaded; they have to work very hard. However, their husbands are very supportive so they have been able to participate in the management of PUDWP. There are many constraints that have to be overcome by the women for active participation in the management of PUDWP.

## 8.2 Findings

As a sociological study this study has made some important findings. Among them, the major findings made by this study have been summed up as given below:

- Among all respondents, 42.6 percent felt women were and are more concerned with the construction of the drinking water project while 35.2 percent felt men as more concerned and 20.4 percent believed that both men and women were concerned about drinking water project.
- 77.8 percent of the respondent women felt that they were encouraged themselves to participate actively in PUDWP activities.
- Similarly, 81.5 percent of the respondents thought that there was a very high level of participation of women during the construction of the PUDWP. While 16.7 percent viewed it a satisfactory one from their side.
- 90.7 percent viewed women's involvement in PUDWP after its construction as very active only while 3.7 percent of them viewed it satisfactory.
- After the construction of the PUDWP, 87 percent of the women respondents said that they are continuously involved in the operation and maintenance of the project after its successful completion, while 13 percent of them expressed that they were not doing so currently.
- 90.7 percent had to use spring/well for collecting water for drinking and other household uses.
- 44.4 percent of the women respondents had to spent more than 20-30 minutes for fetching water while 40.8 percent had to spent more than 30 minutes, 11.1 percent had to use 10 minutes or less and 3.7 percent had to spent10-20 minutes for collecting water before the construction of the drinking water project.

- A vast majority of respondent women i.e. 79.6 percent have to spend only about 5 minutes to fetch water for domestic purpose and 20.4 percent of them also need not spend more than 10 minutes for this purpose after the construction of the project.
- Now 53.7 percent of the respondent women have started seasonal and off-seasonal vegetable farming near their households after the project construction. Likewise, 42.6 percent of the respondent women use this water for kitchen gardening.
- 94.4 percent women respondents felt that the project construction has saved a large part of this time invested in fetching water.
- 83.3 percent have felt convenience in fetching water after the PUDWP's construction. Now they no longer need to carry the water pots in their back from far-off places. Due to this, surely their work burden is lessened which may have some indirect implications in other creative tasks for the betterment of this and their families' life.
- In the households of 56 percent of the respondents males take care of domestic animals and 49.1 percent of them prepared tea, 43.4 percent of them cook food for the household, 39.6 percent of them care children. These figures reflect the version of the women respondents.
- 94.4 percent of the respondents have been able to add more time in IGAs from both agricultural and non-agricultural sectors.
- Likewise, 61.1 percent of the respondents have been able to invest the saved time for social and development related works in the society.
- Similarly, 54.9 of them are now able to append more time to agriculture.
- In the same way, 49 percent of the respondents have been able to provide extra time for child caring while 46.30 percent of them have now managed to use saved time for adult literacy classes.
- Now 90.7 percent of the respondents practice kitchen gardening. From the kitchen garden, these women are now producing some vegetables and cash crops around home by using the saved time after the construction of the PUDWP.

- 96.3 percent of the respondents held that their continuous involvement in the management of PUDWP has contributed to lift their confidence level.
- From the household of 59.3 percent of the respondents, women represent in such social meetings and gatherings while from 37 percent
- 92.6 percent of the women respondents involved in decision making process in various phases of the PUDWP's construction.
- 77.8 percent of the women have a strong desire of participating in development activities in the future too while 13 percent of them didn't know what they felt.
- 48 percent of the respondents were involved in forest management while
   3.7 percent of them were engaged in school management.
- Similarly, 7.4 percent of them were participating in other kinds of development activities. Here the others category of development activities includes irrigation management, sanitation programme, road construction, farmland management, etc.

### 8.2 Conclusion

The major impact of the intervention was undoubtedly access to potable war with the installation of tap water supply system. With access to water, there has been an increase in instances of animal rearing, kitchen gardening, where the majority of the households are engaged. The PUDWP has been successful in saving time of the women due to the installation of tap water supply thus helping women to carry out other activities.

For the women of the poor and poorest households, the time saved has helped them to include in livestock raising and agricultural activities and wage labour thus contributing to their household economy. But for the women of the rich and medium households it has added to more work burden for vegetable farming and milk selling as an income generation activity employed has failed to bestow them with the anticipated economic welfare. Thus it has only come about as an added income in the households of the rich and moderate but it has had an impact on the autonomy of the women. The gender relationship in PUDWP has been witnessing changes although the differences are not astounding. The first change came about with milked animal rearing where women become major milk seller of the village. The second major change was instigated by piped water supply installation. During the process, women were compelled to attend meetings. Qualitatively, their participation rate becomes higher. Nevertheless the step has brought out the realization among the men that women should be a part of the community development activities. With numerous meeting held in the process, women eventually become accustomed to attending meeting along side of men and they could grasp the discussions more. PUDWP provided more time for women to partake in income generating activities like portaging, liquor brewing and livestock farming.

During portaging season, when women porter often men, especially belonging to household without other women, assist their wives in chores like cooking, cleaning or those related to livestock farming. As a member who earns, women have increasingly begun to intervene at the decision have begun to acquire more significance. The women presently get opportunities and encouragement for men of their household and villagers to participate in community activities like cooperative, school management, forest management, *Kulo* committee, etc. women may not be as active as men during the meetings but unlike easier time (before PUDWP), women now seek clarification on matters they are not able to understand.

The cradle of gender discrimination goes back along way. Therefore a complete transformation in gender relationship cannot be expected within a few years time period. It is thus imperative to encourage and build confidence of women to be active at the community level rather than restrict themselves to performing manual labour in domestic chores. More important is for men to develop an attitude of acceptance and adaptation to the fact that women are their equal partner and not subordinate beings and they are also the responsible component of the community and their strength and potential must not be ignored.

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#### Appendix 1

## Impacts of Drinking Water Project on Rural Women: A Sociological Appraisal of Pelakot Udiyachour Khanepani Ayojana, Pelakot, Syangja

Bhim Prasad Neupane M.A. Second year Roll no. 048/049 Anthropology/Sociology

#### A Research Tool for Primary Data Collection

#### A. Household survey

House No:

Name of Respondent:

#### **Family Information**

S.N	Age	Gender	Marital status	Education	occupation
1.					
2.					
3.					
4.					
5.					
6.					
7.					

#### **General Information**

S.N	Question		Answer		
1.	Age				
2.	Gender	1. Male 2. Fem	1. Male 2. Female		
3.	Education	1. Illiterate 2. Li	iterate 3. S.L.C 4.	12 pass	
4.	Religion	1. Hindu	2. Buddhist	3. Hindu-Buddhist	
		4. Islamic	5. Secular		
5.	Caste/Ethnicity	1. Brahmin	2. G.T.	3. Thapamagar	
		4. B.K.	5. Nepali		
6.	Occupation	1. Agriculture	1. Agriculture 2. Animal husbandry		
		3. Udyog	4. Service	5. Trade	
7.	Income source	1. Service	2. Trade 3. Wag	ge Labour	
		4. Farm work			
8.	Source of water before	1. Stone tap	2. River 3. Pone	d	
	PUKA	4. Water line (ca	anal)	5. Rainwater	
9.	Toilet in home	1. Yes	2. No		
10.	If toilet in home, type	1. Open 2. Simp	ple 3. pit		
		4. Water seal			

#### **B.** Interview Schedule

Before PUKA		After PUKA	
Female Member	Male Member	Female Member	Male Member

### 1. Who used to go / goes to bring water in your home?

### 2. Who collects water for the following purposes?

Functions	Male	Female	
Household uses			
Special occasions			
Construction works of buildings			
Critical condition i.e. conflagration			
Kitchen gardening			
Sanitation, toilet use			
	Household usesSpecial occasionsConstruction works of buildingsCritical condition i.e. conflagrationKitchen gardening	Household uses         Special occasions         Construction works of buildings         Critical condition i.e. conflagration         Kitchen gardening	Household uses       Special occasions       Construction works of buildings       Critical condition i.e. conflagration       Kitchen gardening

#### 3. How long does it take / used to take for harvesting one vessel of water?

Time in minute	0-5	6-10	11-15	above 16
before PUKA				
After PUKA				

Q.No.	Questions	Answer	Goes
4.	Is there regular water supply in your	1. Yes, regular	6
	water tap?	2. Irregular	
		3. Sometime irregular	
5.	If irregular when and why?	1. In dry season	
		2. In heavy rainy day	
		3. Because of physical damage	
		4. Carelessness on system	
6.	Is there time saving because of water	1. Yes	
	supply of PUKA	2. No	9
7.	What types of easiness you are feeling	1. Good facility	
	after the PUKA in your village?	2. Simple facility	
		3. Uneasiness feeling when it is	
		irregular	
8.	Where you are investing your saving	1. Caring for children	
	time made by water easy ness	2. Social work	
		3. Economic activities	
		4. Adult literacy class	
		5. Agricultural work	
9.	Are you supporting for household	1. Yes	
	expenditure?	2. No	11
10.	If, yes how?	1. By selling vegetables	
		2. By selling hens and goats	
		3. Service	
		4. By selling firewood	
		5. By selling diary products	
11.	Are you making kitchen garden in your	1. Yes	
	home?	2. No	14
12.	Is it possible to irrigate kitchen garden	1. Yes	
	by PUKA water	2. No	
13.	Who works much in kitchen garden	1. Male member	
		2. Female member	

	PUKA?				
S.N.		Before PUKA		After PUKA	
		Male	Female	Male	Female
14.1	Making food				
14.2	Tea making				
14.3	Giving fodder to reared animals				
14.4	Grazing the animals				
14.5	Decision on animal selling				
14.6	Harvesting water for use in home				

14.	Who are more responsible to perform the following household works before and after the
	PUKA?

Q.No.	Questions	Answer	Goes
15.	Are women involving in other	1. Yes	
	development work because of	2. No	6
	availability of PUKA water facility		
16.	If yes where are they involving?	1. Forest management	
		2. School management	
		3. Health programme	
		4. Sanitation works	
		5. Adult literacy programme	
17.	Who puts more interest on water	1. Male	
	concern cases	2. Female	
		3. Both equally	
18.	Are you ever involving in PUKA	1. Yes	`
	system management and maintenance	2. No	
	works		
19.	Are you member of PUKA management	1. Yes	
	committee	2. No	
20.	Are there any major problems related	1. Late on water fee collection	
	with PUKA maintenance and	2. Less interest of women	
	regulations	3. Less interest of male	
		4. Dam damage on rainy time	
21.	Are here any special organizations	1. Mothers group	
	formed by women?	2. Women development programme	
		3. Women literacy programme	
		4. Women credit group	
22.	Who plays the leadership role on PUKA	1. Management committee	
	management any regulation related	2. Female group	

	works	3. Male member	
23.	Who is more participating in PUKA	1. Female member	
	related work from your house?	2. Male member	
		3. Children	
24.	For purpose maintenance works are	1. For quality development	
	being done	2. For protection of PUKA	
25.	What types works should perform in emer	gency work of PUKA?	
26.	How are the costumers called in PUKA emergency work?		
27.	Is there any difference findings in PUKAs system management, peoples participation after the		
	PUKA handover to the community.		
28.	Are women encouraged to be participated in PUKA's activities?		
29.	What is the role of women to solve the water related conflicts in PUKA?		
30.	What types of arguments are found in women's suggestion on PUKA by male members?		
31.	What was the role of women?		
	1. Very good participation		
	2. Normal participation		
	3. No participation		
	4. Carelessness on it.		

Q.No.	Questions	Answer	Goes
32	Is it possible to use PUKA water in	1. Yes	
	other purpose	2. No	34
33	If yes for what purposes?	1. For animal	
		2. Sanitation	
		3. Kitchen garden	
34.	Are traditional sources of water are	1. Yes	
	being used and protected here?	2. No	36
35	If they are protected on what purposed?	1. To fulfill the need of water	
		2. To protect the sources	
		3. Religions importance	
36.	Are women called to decide new matter	1. Yes	
	are PUKA	2. No	
<u></u>			

37.

Will you tell any suggestion and comments for the smooth development of PUKA?

- 1. Comments
- a.

b.

c.

- d.
- 2. Suggestions:

Thanks for your kind cooperation

## Appendix 2 List of Key-Informants

S.N.	Name	Designation
1.	Mr Mani Prasad Pathak	PUKA initiator 2038 B.S.
2.	Mrs. Subhadra Pathak	Chairperson, Adma Samuha Pelakot VDC-6.
3.	Miss Domara B.K.	Chairperson, Ama Samuha Pelakot VDC-5.
4.	Mr. Thirlal Pathak	Serviceman- PUKA
5.	Mrs. Chemakala Neupane	PUKA Member
6.	Mr. Laxmi Prasad Pathak	Social Worker
7.	Mr. Chandi Prasad Pathak	Teacher

Appendix 3 Photo Gallery



A glimpse of the meeting of the PUKA's users



