

**PEOPLE'S PARTICIPATION IN COMMUNITY FOREST  
MANAGEMENT: A CASE STUDY OF KALIKA PIPALTAR  
COMMUNITY FOREST**



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**LETTER OF RECOMMENDATION**

This is to certify that **Ms. Pushpa Mallik** has written this dissertation entitled **“PEOPLE’S PARTICIPATION IN COMMUNITY FOREST MANAGEMENT: A CASE STUDY OF KALIKA PIPALTAR COMMUNITY FOREST USER GROUP AT DAHAKHANI VDC OF CHITWAN DISTRICT”** under my guidance and supervision. I, therefore, recommend this dissertation for final approval and acceptance to the dissertation evaluation committee.

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**APPROVAL SHEET**

This Dissertation entitled **“PEOPLE’S PARTICIPATION IN COMMUNITY FOREST MANAGEMENT: A CASE STUDY OF KALIKA PIPALTAR COMMUNITY FOREST USER GROUP AT DAHAKHANI VDC OF CHITWAN DISTRICT”** prepared and submitted by **Ms. Pushpa Mallik** in the partial fulfillment of the requirements for the Degree of Master of Arts in Sociology is hereby approved.

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## **ABBREVIATION**

CBS	:	Central Bureau of Statistics
CF	:	Community Forestry
CFDP	:	Community Forestry Development Program
CFP	:	Community Forestry Program
CFRM	:	Community Forestry Resource Management
CFUG	:	Community Forest Users Group
DDC	:	District Development Committee
DFO	:	District Forest Office
DOF	:	Department of Forest
DFRS	:	Department of Forest Research and Survey
FD	:	Forest Development
FECOFUN	:	Federation of Community Forestry User of Nepal
FUG	:	Forest Users Group
FY	:	Fiscal Year
ha	:	Hectare
ICIMOD	:	International Center for Integrated Mountain Development
INGO	:	International Non- Governmental Organization
JF	:	Joint Family
MPFS	:	Master Plan for Forestry Sector
NGO	:	Non- Governmental Organization
NF	:	Nuclear Family
NPC	:	National Planning Commission
PF	:	Panchayat Forest
PPF	:	Panchayat Protected Forest
PRA	:	Participatory Rural Appraisal
SF	:	Single Family
VDC	:	Village Development Committee

# CHAPTER - 1

## INTRODUCTION

### 1.1 Background of the Study

Forests are a striking feature of land surface. The forests of a country are natural assets of great value which unlike mineral resources are renewable and can be kept perpetually protected, productive and useful under proper management (Moon and Brown, 2001).

The forests of Nepal are the second largest natural resource after water in the country. The area under forest is 4.27 million hectare that is 29 percent of the country's total area (DFRS, 1999). Beyond its small size, because of altitude variation, Nepal has diversity of forest types ranging from subtropical forest in the lowland called Terai to the alpine meadows in the mountain.

Forest is one of the most essential natural resources in Nepal. People use forest for many purposes like fuel wood, fodder, timber and minor forest products such as fruits, nuts, medicine, honey etc. It is essential to protect soil against erosion, provides clean water, reduces landslide, floods, maintain ecological balance and prevents environmental degradation. It also plays a religious function between the Hindu and Buddhist. The people of Nepal worship various species of trees like Peepal, Bar, Amala, Kus, Tulsi etc. For example, the Hindu sees the Peepal and Tulsi as the incarnations of Lord Bishnu. Because of such values of forest, in Nepal there is common proverb "*Hario Ban Nepal Ko Dhan*".

Nepal is predominately an agricultural country where more than 78 percent of its population relies on farming for their subsistence. The majority of farmers occupy less than 0.5 ha of farmland. The small patch of land is not fertile enough. Therefore, they depend on forest products. People seek to use forest either as agriculture land or as source of earning. Such people depend on forests for fuel-wood, fodder, timber, herbal plants and other forest resources (Rizal, 2008).

Despite the worldwide importance of forest, deforestation is a serious problem for almost all the countries of the world. For the reduction of deforestation, several

approaches have been coming, among which community forestry is a popular approach. In community forestry, national forest is handed over to the forest users group for its development, conservation and utilization for their collective benefits. Community forestry describes the situation where forests are controlled and managed as common property by groups of rural people who agree to use them to support their farms, households and communities (Mathema, Shrestha and Sthapit, 1998). In other words, community forestry is the control, management and use of forest resource by the villagers for their own benefit and for the benefit of the society as a whole. The concept of community forestry dates back to ancient times. Management of forest resources was at first well developed in England by the middle ages with clearly defined use and ownership rights and such rights were already dated from the time immemorial (Verkade, 1996).

In modern context, community forestry has evolved dramatically in the last two decades. It was initially designed to arrest forest destruction, improve rural development and meet the basic need of the rural poor. The concept of community forestry emerged in response partly to the failure of the forest industries development model to lead socio-economic development and forest land degradation in the third world (Dahal, 1994).

The attraction of CF is that it brings tangible benefits to the forest assets and stimulates them to undertake conservation activities that are fundamental to the development and sustainability of these benefits (Dahal, 1994). Forest has the capacity to generate substantial economic benefits for local communities both as a supplement to household income and to support community development activities. However, sustaining both the income and the forest depends on addressing a range of institutional, socio-economic and political issues. In the context of Nepal forests are the major sources of energy with the view to satisfying needs of increasing population of the country. The indirect productive advantage of forests can be stated as that of controlling floods and landslides, reducing national disaster, like heavy floods, drought and others. Forest is useful to maintain ecological and environmental equilibrium (Barlett, 1992).

In Nepal, the concept of people's participation in forest management was recognized in 1978 AD. Before that foresters of Nepal were familiar only with terai forests which

were managed in order to generate revenue for the government. During the seventies, hill district forest offices were established and forestry officials were appointed to manage the hill forests. In the hills, forests are scattered; therefore, large-scale management by the government as in the terai was not possible. At the same time, the hills had limited access to markets for forests products since there were no roads. Therefore, the government concluded that the best strategy for protecting the scattered and degraded hill forests would be the forest managed with people's participation. In this context the community forestry program was initiated in the late seventies. Completely degraded forests were initially handed over to communities as Panchayat Forests (PFs) and Panchayat Protected Forests (PPFs) (Joshi, 1993; Karki, et al. 1994 and Uperety, 2000).

Later, in 1990, these PFs and PPFs were changed to community forests managed by forest user groups (FUGs). In fact, the concept of FUG based CF was put forth by the Master Plan for the forestry sector in 1989. This programmes relies on local FUGs for protection, management and utilization of forests. The master plan has given emphasis on handing over all accessible forests of hills to local communities to the extent that they are able and willing to manage them. The challenge of CF programme is to mobilize the members of FUG to manage the CF to meet their subsistence needs of forest products and improve socio-economic condition (Ibid.).

For that purpose the government invested considerable resources, and used foresters and ecologists to convince people to form user groups for managing the forest around their villages. As the DOF did not have enough trained professional manpower on hand, CFs were never developed into well managed production forests, protection-oriented operational plans, which were easier to prepare than active production oriented operational plan. Gradually, the protection scheme improved the quality of the forests, and increased the richness of species and overall biodiversity. However, even after forests were healthy, protection oriented plans continued to be prepared. Local people were not able to get the benefits, which they could have obtained if they had been allowed to manage the forests based on production oriented operational plans (Ibid.).

The major challenge today is to address the technical and social issues related to active forest management. These issues are often referred to as "the second generation

issues of community forestry". Until and unless these issues are addressed their potential benefits cannot be achieved fully. Women's lives are the most seriously affected by environmental damage and the shortage of forest products. Women, together with their children, are the main collectors of fuel and other forest products such as animal fodder and leaf-litter for compost. They also take primary responsibility for herding family livestock, including cattle, pigeons and goats. Women's roles in the collection of forest products are associated by the context of their other household responsibilities (Molnar, 1987).

Several factors explain the differences between male and female workloads. In addition to agricultural and animal husbandry responsibilities, women have primary responsibility for food processing, fuel and fodder collection, and domestic chores, including cooking and child care. In many households men have migrated to other parts of Nepal or to India or even abroad in search of wage labour and temporary employment to supplement household income. The women then must assume a great proportion of the agricultural tasks as well (Rizal, 2008).

Women are primary managers, sources of information and teachers in the use of natural resources. Women maintain a rich storehouse of indigenous technical knowledge of forest management that can be mobilized in problem solving process in natural resource management sectors, especially community forestry, watershed management, agriculture and animal husbandry (Adhikari, 2001). They have triple responsibilities i.e., for production, for reproduction at the household level, and for management of a range of activities at the community level. Women are involved in most aspects of forest management. However, in many cases, women are excluded from different phases of community forestry in Nepal including membership and participation in forest user groups. After participation of women in Community Forest management there have been many changes because women always been sincere for their work. After their participation, protection of forest was found effective. So women play a vital role for the management of forest resources in Nepal (Raut, 2006).

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

Although the basic concept of CF is to fulfill the basic needs of forest products and to uplift the socio-economic condition of local people along with rural development,

however, today it is facing many problems and difficulties. There are some internal challenges related to management faced by CF in Nepal namely the non-participation of CFUs in management procedures because of various reasons, incapability in forest benefits to meet the demand of users group; incapability in mobilizing of the users fund properly for poverty alleviation and rural development program; ignorance of sentiments, norms, managerial skills, customs and culture of local users by foresters and NGO officials, corruption by some user groups especially by the committee members, forest officials, leaders etc.

In order to alleviate the problem of deforestation people's participation particularly in forestation and related activities are imperatively optimized. But due to presence of above reasons, the steps of turning CF policy into practice has been slow both within Nepal and most other countries. The philosophies behind CF are quite simple but its practice is enormously complex because of the social factors involved.

Hence, in the Study, it is felt that in order to protect the forest from the rapidly increasing deforestation and for its conservation and management only government effort is not enough, local people also need to be conscious and more and more participation in CF is necessary. Also, the strength and weakness of CF programs and its player's strategies need to be reviewed. This study is carried out to answer the following sequence of questions.

- What is the socio-economic background of FUGs?
- How do the local people participate in community forest management?

### **1.3 Objectives of the Study**

The overall objective of this study is to explain the people's participation in community forest management in Kalika Pipaltar community forest which lies in Dahakhani VDC, Chitwan district from socio-cultural perspectives. In general, this study has tried to analyze people's participation in forest management in the light of caste, class and gender. The specific objectives of this study are:

- i. To find out the socio-economic characteristics of the FUGs members of the study area.
- ii. To assess the local people's participation (including in CFUG formation process) in community forest management.

#### **1.4 Importance of the Study**

This study will be important for investigating the changes in the CFUG study area. The findings of the study will be helpful for the implementing agencies in the formulation of plans and policy maker to formulate the appropriate plan for further development to gain economic achievement and also to improve the participation approach in community forestry of the users. It may open up the further problems to be researched. The findings of the study may help the rural people to decide for participation in community forest management.

In Chitwan district, very limited studies have been carried out about the people's participation in community forest user group. The major contribution is providing valuable information issues of participation, equity and management in community forestry development in district and national level.

This may be helpful to policy maker, planners, and professionals in journey to consider people's participation, equity and management in community forestry development in district and national level. The study also helps to promote the role and importance in forest management, role of people in community forest user group and also their action towards community development.

This study also helps to researcher to develop skills and confidence on the research purpose as well as enhance the sociological and anthropological knowledge at the academic levels.

#### **1.5 Organization of the study**

The research has been divided into five chapters with its sub – topics. The first chapter has focused the introduction part with background of the study, statement of the research problem, objectives of the study, rationale and organization of the study gradually.

Similarly, the second chapter has been literature review focuses of scientific understanding of study and review relevant literature on community forestry to find out the gap and valid the presentation of this research.

The third chapter has talked about the research methodology with introduction and rational for the selection of the study area, research design, nature and source of data, universe and sampling, data collection techniques (tools / methods), data presentation and analysis and limitation of the study.

In the same way, the fourth chapter has objective – based analysis and interpretation of the collected information. And the final chapter has summarized the major findings and its conclusion. At the end of this study, selected references and appendices have been placed.



## **CHAPTER – 2**

### **REVIEW OF LITERATURE**

Literature review has helped the researcher to clarify the concept and fundamental ideas as well as formulate new ideas and better ways of looking at the study topic. The relevant literatures on community forestry are reviewed, so as to specify and better understand the problem. It is commonly said that it is not worthy to conduct the research on an area in which large number of findings have already been made. Therefore, researcher has preferred to "take the road less travelled" in order that the study could provide, at least, something new for the concerned people. Mostly, published literature is reviewed to know what has already been done.

#### **2.1 Forest in General**

The word 'Forest' is derived from the Latin word 'Foris' meaning outside, the reference apparently being to a village boundary or fence. Today, a forest is any land managed for the diverse purpose of forestry, whether or not covered with trees, shrubs, climbers or such other vegetation. Technically, forest has come to be defined as: an area set aside or maintained under vegetation for any indirect benefits, mainly climatic, protective or environmental and / or for production of wood and non-wood products. (Moon, et al., 2001)

Forestry is the science, art, and business of sustainably managing our forests for all of the multiple uses and values required by society for its social, biophysical, and economic well-being (Reino, 2005). Forests affect how we live and provide many things we use, so it is important to take care of them, understand what they give us, and use them wisely. It is estimated that there is about 6 billion hectares of forest around the world which has been declining steadily. About one third of the forests have been lost during the past two hundred years. And the problem is that the rate of deforestation has been increased in recent years, mostly in developing countries, however, the condition has more or less stabilized in the developed countries.

Urban forests include a number of forest environments such as green belts, parks, reserved lands, industrial and commercial green zones etc. Management of these forests is

coordinated with the management of the cities. Urban forests and trees have more aesthetic values than rural trees. Besides beautification, urban trees also help in maintenance of natural process such as water and nutrient cycles, support for ex-situ flora and fauna conservation and provide provision for social, economic and environmental benefits (Mishra, 2061 BS).

Forests have recently become sources of new goods and services including pharmaceuticals, industrial raw materials, recreation and tourism. Forests regulate water quality by slowing soil erosion and filtering pollutants, and they help regulate the timing and quality of water discharge. In addition, protection of forests, afforestation and reforestation also play very important role in preventing, reducing and degradation (Ibid).

Wild animals and birds are freely enjoying in forests. To observe and get recreation tourists prefer to visit such places for video graphic. Hence, forests provide an important area for researchers and nature lovers (Dhimal, 2061 BS).

Forest areas can be developed as a site of eco-tourism. Forest is an open natural laboratory where all the functions of ecosystems can be studied in natural state. Forest air contains large quantities of volatile oils (terpenes). This aromatic substance favorably affects forest visitors. They deepen respiratory intensity (Subedi, 1994).

## **2.2 Forest of Nepal**

The forest of Nepal is the most essential natural resource which is the second largest after water. The forest cover about 4.27 million hectare that is 29 percent of the country's total area (DFRS, 1999). Because of altitude variation, Nepal has a diversity of forest types ongoing from sub-tropical forest in the low land called terai to the alpine meadows in the mountains.

The Forests Division was established in 1942 for the scientific management of forests under state ownership (HMG/N 1976). During the period from 1942 to the mid-1970s forest management was exclusively protection oriented. Because people live near and are dependent on forests, management must include local people as they fulfill their needs for firewood, fodder and timber. Although the forests have been nationalized and forest officials made very powerful, deforestation continued and forest management was practiced in vain. Forest management as practiced exclusively by the department was not

successful, local people in forest management and providing an incentive for local management became a crucial issue. The National Forest Plan of 1976 was highly committed to initiate people's participation in forest management and made provisions to hand over a part of government forests to local political units or village councils called "Panchayats."

In Terai, forest area has decreased at an annual rate of 1.3 percent from 1978/79 to 1990/91. In the hilly area, forest area has decreased at an annual rate of 2.3 percent from 1978/79 to 1994, whereas forest and shrub together have decreased at an annual rate at 0.2 percent. In the whole country from 1978/79 to 1994, forest area has decreased at annual rate of 1.7%, whereas forest and shrub together have decreased at annual rate of 0.5 percent (DFRS, 1999).

### **2.3 Concept of the Community Forestry in Nepal**

A community forest is the section of national forest that is handed over to a group of user households for control, proper management and sustainable use for the group benefit. The income derived from the sale of forest products will go to the user's group fund. All the decision about the forest resource within the CF is made by the users' committee. The community forestry program is the process by which government, through the department of forest makes community forest a reality for rural communities. The special feature of community forestry is that the local organizations sponsored by government are to manage and conserve forests. In CF a direct link is forged between community development and forest conservation CF is a viable strategy for arresting the rate of land degradation and fostering the return of species to prescribe degraded habitats in Nepal. Community forestry can yield improvements in both rural culture and forest condition because the managers of the resources and its local users are the same entity (Gilmour and Fisher, 1991).

However, from last two decades CF program has been adopted as one of the major strategies for managing country's forests. The program aims to fulfill the basic need of the people and also increase their capabilities in managing the resources. It encourages people to get involved in the forest management for their own benefits. CF is seen as a successful program in many parts of the country, particularly in regeneration forest resources, which has contributed directly or indirectly to the advantaged/disadvantaged

people (Regmi, 2000).

People's participation is a vital strategy in the absence of which CF programs will be handicapped. Transfer of power to the people is the surest means of promoting people's participation in CF (Karmacharya, 1987).

According to Kayastha (1994), CF encourages the participation of local people in decision making by:

- Providing for local control over forest management.
- Providing directly a local source as funds for community development.
- Encouraging local participation in defining needs and setting priorities for development.
- Encouraging local participation in defining and implementing solutions.
- Strengthening local links between development and forest conservation.

In the past, people's participation in CF was very limited (Kayastha, 1994). It was limited to the contribution of free labour for the construction of nursery and plantation activities; but with the time, the concept and the trend has been changed tremendously. People's participation is increasing being recorded as a critical component of CF.

So, it can be said that CF in Nepal is about establishing a partnership between the government and the forest users groups which is seen as a deliberate and conscious application of business methods and technical forestry principles to help the village community. People's participation is the most essential techniques of CF in Nepal.

#### **2.4 Historical Background of Community Forestry**

Most of the people of developing countries are poor so they have to depend on natural resources for their livelihood. But due to the population growth, the pressure on the natural resources has been expanded dramatically, especially forest clearing for agriculture and industrial demands for timber in the developing countries of the world. In the past, the forest policies of mostly developing countries had viewed that the people were the prime threat to the forest. Mostly all countries had nationalized their all the private forests to protect, manage and utilize for people's welfare by the governments so that they would not be depleted. As a result of nationalization of forest, the forest

condition of most countries continued to worsen and government thereafter realized that unless people are involved in the management of the forests, the government alone couldn't manage them.

Thus, with this concept, community forestry program was started in many countries of the world. However, the terminology used for it and their methods of implementation are different in the different parts of the world. Now, the "Community forestry" is a village-level forestry activity, decided on collectively and implemented on communal land, where local populations participate in the planning, establishing, managing and harvesting of forest crops, and so receive a major proportion of the socio-economic and ecological benefits from the forest (Martel & Whyte 1992).

## **2.5 Community Forest in Nepal**

The way community forestry approach used to be defined and interpreted in Nepal up until late 70s, suggests that community forestry implies 'community-resource' relations, commonly known as 'indigenous system of forest management' (Fisher 1989), which was widespread in Nepal's hills. During 80s and beginning of 90s, nevertheless community forestry was further conceptualized and internalized, new policy framework was crafted (HMGN, 1988), legal instruments have been in place (HMGN 1995), various processes, methods and tools have been developed, modified, re-modified and experience gained. During this period, community forestry was understood and recognized as government's priority programme, for which the role of forest bureaucracy in the hills changed from policing to facilitating leading to the evolution of community-resource relations towards a triangular interface among community, resource and government bureaucracy.

The community forestry program in Nepal officially started in the late 1970s. Since then, a movement has been evolving to involve local communities in the management and protection of forests. The policy of the government was cognitively intended for the basic forest products required by the communities, through the active participation of communities in forest development and management. Later, it was expanded to include the mobilization and empowerment of the members of community forest users groups (CFUGs) in the development of their local communities. The authors have observed that the trend of forest degradation has decreased since handing over at national forest to local communities, but a number of unintended social anomalies have also cropped up.

Such anomalies essentially constitute inequality and infamous at the local and national level and in terms of long term sustainability of forest resources. This paper attempts to provide an overview of community forestry, especially forestry. It calls for a reorientation of the community forestry program in order to face the present day colleges of linking community forestry with livelihood promotion and income generation, good governance, and sustainable forest management (Kanel and Kandel, 2061 BS).

Nepal published its policies of forestry sector through master plan for forestry sector (MPFS) in 1988. The main strategy of MPFS is to promote people participation in forest resources development and to develop CFUGs. CF has become one of the prioritized programs in forestry sector of Nepal. It has opportunity to be grown up after democracy reformed in Nepal in 1990. Government passed "Forest Act 1998". This Act legally accepted people participation in community forestry programmes in Nepal. Forest by laws under this act published only in 1995. The CF of Nepal is considered as one of the most purposive policies in the world. In 1976 national forest plan covered a wide range of forestry and related activities. It focused on five strategic areas: environmental conservation, economic mobilization through forestry, scientific forest management, developing technology and people's participation. People's participation has accepted as an alternative way for managing such dispersed hill forest by the government of Nepal by handing over the control and responsibilities of management of local forest to local group of people after 1978 (Mathema et al., 1988).

Community Forestry is such an effort, in Nepal, evolved in one of the main components of country's forest development strategy during past two decades. Nepal was one of the first countries to embrace hilly community forestry as the main strategy of its national forest policy (Barlett, 1992). Local communities have usual right over the forest resources through a Forest User Group (FUG), group involving all members of the community that regularly use a forest to meet their household needs.

Community forestry program in Nepal is based on the principle of devolution, and it is an attempt to improve the socio-economic conditions of rural communities and halt environmental degradation. Despite the successful development of CF in Nepal there are instances when not all people receive the same benefits that could be conducive to discussion of equity issues within the FUGs (Richards, Maharjan and Kanel, 2003).

### **2.5.1 An Account of Community Forestry and Community Forestry Resource Management (CFRM)**

The modern concept of CF is the brain child of 20<sup>th</sup> century fashioned by natural catastrophes and debacles of various sorts and acknowledged as a therapy for natural disaster management, rural development and sustainable fulfillment of rural people's forest resource need (Gilmour and Fisher, 1989).

CF is one form of 'social' forestry that has its roots in the change in development theory from industrial forestry, based on the Northern European micro economic model (Van Gelder and Keefe, 1995), towards local level forestry geared towards the subsistence needs of local communities through their own participation. It has been said that CF has more to do with people than trees (Gilmour and Fisher, 1989), and this has been reflected in an approach traditionally dominated by the social sciences. As CF is more than tree planting, the sociologists, anthropologists, professionals, researcher or planner becomes someone who should support the local CFUGs in its efforts to get its resource back. By obtaining users participation at all levels of resource management including flora and fauna management and integrating it into rural development programs, CF programs will be better able to fulfill its dual purpose of improving the well-being of communities while simultaneously helping to preserve the diversity of the natural world. The move towards community based forest management studies from sociological point of view will be undoubtedly one of the most important developments. This will result in the analysis of CFRM activities from users perspective, with a shift from centralized forest management towards more decentralized local management resulting in the evolution, testing and occasional institutionalizing of a wide range of community based forest resource management approaches consequently seeking the participation of the users of all background at all stages and levels.

### **2.6 People's Participation in Community Forest Management**

People's active participation in forest resources development which would be stimulated by their own thinking and deliberation and over which they control. An effective way for achieving people's participation is through community organization which local people will themselves set and manage (Barlett and Nurse, 1991).

People's participation is the most essential features of CF Genuine participatory approach is important and the association of participation in the program should grow out the community organizing process. Participation in CF includes all stages of decision making to benefit sharing. In Nepal there has been a traditional approach with rural people involving themselves in CF resource management. The participants of people in management and utilization of resources has been increasing the forest committee members participate in planning process of management (Kayastha, 1994).

It is realized that people's participation is the best way to adhere to the objective on effective protection are management of first resources. It is suggested for popular participation that lasting local practices institution, organizational structure and local user group should be recognized. People should be convinced that they are not only the protector but the immediate beneficiaries as well. Effective participation can be further increased if people are well informed about the program and sense of belonging is created through motivation and awareness (Kayastha, 1994 & Chhetri and Pandey, 1993).

The main strategy of HMG master Plan was to promote people's participation in forest resource development and to develop community forest user groups as one of the important alternatives for the forestry sector in Nepal (Dahal, 1994).

The active participation of villagers should be encouraged in the different activities of community forest. Accordingly, implementation of the operational plans, which were developed by the users in conjunction with Forest Department field staffs, has shown that there is a continuing role of the Forest Department field staffs after the plan has been approved. Where the villagers do not have experience in harvesting green forest products, training may be required. When the conflicts arise the field staff or DFO may be required to act as an arbitrator. It is preferable that the villagers be given the opportunity to solve their own conflicts before the field staffs take an active role. It must also be recognized that in many cases the first operational plan negotiated with the users groups may not be perfect and it may need to be modified as users gain experience. The composition of the users group may change over time and the users may wish to vary the rules and management prescription (Acharya and Barlett, 1991).

There are a number of benefits to the government that can be gained from promoting people's participation:



- More accurate and representative information about the need, priorities and capabilities of local people.
- Adoption of program activities to meet local conditions so that scarce resources can be employed more effectively. Tapping of local (indigenous) technical information that can otherwise be costly to obtain.
- Local cost of access to the public for extension programs through local institutions and organizations.
- Improve utilization and maintenance of government facilities and services.
- Mobilization of local resources to augment or even substitute for central government resources.
- More reliable feedback on the impact of the government initiatives and programs.
- Active cooperation of local people on new programs (Uphoff, 1992)

In the Asian countries women (more than men) spend a significant portion of their time in forest related activities such as farming, collection of fuel wood and fodder, grazing animals, fetching water and cooking. Several studies conducted in different parts of country so that this is also case of Nepal and such studies stress the need to involve women in forest management so that the community itself can protect and develop local forest resources successfully (New ERA, 1983).

Castillo advances that people's participation depends freely on how effective a program is fulfilling the interest of people. "Participation in general is understood as a process rather than a static product. This reflects that participation is a dynamic learning (Castillo, 1983).

Lamichhane (2000) carried out his research in Ramechhap district and he found that before the involvement of district forest office and other line agencies in providing training to users, need of interest group was not addressed in most of the community. The local elite controlled most of these resource. The group was not mobilized effectively. But after awareness training to local users, users started to adopt democratic decision making process. Involvement of lower caste in Forest User Committee also increased from 2 percent to 7 percent in 1999.

## **2.7 Women in Community Forestry**

Ever since, the emergence of concept of CF, it is realized that for sustainable resources, women's participation is necessary. As women are primary users of forest product and their traditional reliance on forest, women are often chief repository of knowledge concerning the use and management of trees and other plants. Since then extensive and close contact with the forest may give local women a more detailed understanding of forest resources than local men. This is partly because women are more likely to make daily trips into the forest areas in different session for food, fodder and fuel wood (Fortman, 1986).

Women are the primary users of forest and consequently should be considered their conservationist, for example, it is women who are responsible for collecting firewood, fodder and plants and roots for food and medicine. In our context women collect 78 percent of firewood and 6 percent collected by girl, by bringing the overall collection of firewood by women folk to 84 percent. As for the role of men they carry the forest product to distant markets and sell them. It is the women who are the forestry gardeners. Sowing the needs and planting the trees, weeding and watering them and caring for their growths. We must take use of women's skill and knowledge for the development and conservation of forest and including them in the planning and design at forestry programs (Subedi,1994).

Participation of women will help forests first and women second. Women will have to give to forestry interest, time, effort, even money in some cases before forest gives to them: Products for household consumption and commercial use, income and consequence improvement in position, status and decision making power. It also shows that women and forestry have a closer link in the rural areas where life is shaped and dictated by availability and access to basic resources such as water, fuel and fodder (Siddiqi, 1989).

The community forest has helped the common to save their time, day to day activities by making available of fuel wood, fodder, leaf litter, and water on the nearby area. The women had spent a lot of time in walking just to get a bundle of firewood and fodder. These days, they don't have to walk along distance since they get in from CF It is clearly seen that the women can perform such activities easily with taking less time than the earlier one. The saved time could be used for other purposes. It could be used for taking care of their children or houses. In fact, the saved time does not appear as beneficial in the rural

life, particularly in the developing countries but indirectly it contributes a lot which obviously makes a lot of impact in the social life and enhance the rural livelihood (Pardo, 1995).

In rural areas, Indigenous women have much knowledge about forest resources such as fuel wood, fodder and medicinal herbs because women are the main collectors of these products. They have an indigenous knowledge about forest resources and its efficient use. Indigenous Women exploit several different forests and numerous areas within the forests. They travel from low hills to high forests as far as six hours walk above their village. During spring and autumn Indigenous women go to the lower forests, visiting higher forests in the winter, not only to collect firewood, fodder, food and herbs- which are almost solely a women's responsibility, but also to cut nigalo, the bamboo group, for men in the village to work with. Thus, rural indigenous women have the knowledge of identification of species, knew species name, its uses, geographic location, reasonability and availability and conservation of the natural resources (Sherpa, 2004).

Tradition, culture, norms and rules of the society are hindrances to women's participation in community forestry related activities. On study (1994) in Dhankuta, Sankhuwasabha and Ilam district shows that traditional perception of women's role and obligations and customary practices in family and property relations do not permit women to participate in the public affairs. One report shows that "the society is more dominated where men are not willing to share their power and authority, and women are not available to work as held staff, without which approaching rural women is next to impossible (Siddiqi, 1989). To contact and talk with unfamiliar person is immemorial in our society. What women do, where women go, is determined by the male member of the family (Ibid.).

Illiteracy is also another impediment in the smooth administrative function of the committee. "The majority of the CF members, particularly women are illiterates, one woman on Hikila Committee and two in Armala were capable of writing minutes but they did not still have necessary administrative skill or experience to do so. They require help from men. Lack of education was seen as a problem by these committees and was given as a reason to include men (Prasai, et al. 1987).

A study conducted in the mid-western development region of Nepal by Pandey (1997) shows that representation of women in the Executive Committee was nil in seven FUGs and

found to be only marginal in others except all-women group. Similarly Adhikari (2001) concludes in his study that CF is as a successful NRM initiative with the management of CFUGs. Management of forest resources through the involvement of resource users has been realized increasingly as a better strategy for protection, conservation and sustainable use of forest resources in the hills. It is clearly demonstrated that women due to their interaction with the natural resources have developed vast indigenous knowledge, skill and technology regarding the conservation, protection, use and management of those resources. From gender prospective, involvement and participation of women in the planning and decision making forum of CF programme were found to be minimal. CF programme cannot be as expected if a present trend of women's low participation continues.

Different literatures suggest that the degree of involvement of women in decision-making and benefit sharing remains low and not influential or they are excluded though they are the principal managers of forest resources (Flintan, 2003; ICIMOD 1999; Bhatta and Gentle 2004; Gentle 2000; Ghimire 2000). But how to involve women in a real sense is a major challenge for decision-makers in elite dominated society. There are still many questions to be answered in this arena, and this study aims to determine status of women's participation in community forest management and explain the promoting and retarding factors with their participation.

## **2.8 Community Forestry Programs and Projects**

There are many projects and programs, which were operational years back, and some of them are operating presently. Almost all of these projects and programs give emphasis on community forest based pro-poor livelihood, governance of forest user groups, technical enhancement and sustainable forest management, and creation of national level enabling environment. A brief description of these projects is given below (Kanel et al., 2005).

### *1. Hill Community Forestry Project*

Hill Community Forestry Project was initiated in 1978, and continued till June 1999 in 38 districts with the financial support of World Bank. The project continued with the support of DANIDA from July 1999 till 2005 July, and was named as Community Forestry Field Implementation Component (CFFIC).

### *2. Natural Resource Management Sector Assistant Program*

Natural Resource Management Sector Assistant Program (NARMSAP) was supported

under grant assistance (US \$ 6.4 million) from DANIDA. The Community and Private Forestry Component (CPFC) and the Tree Improvement and Silviculture Component (TISC) were components of NARMSAP with support of US \$10 million from DANIDA, which supported activities through direct funding and technical expertise. The program also supported district level community forestry training and Regional Training Centres. TISC is the continuation of the Tree Improvement Project (1992 to 1998), which carried out activities related to silviculture, forest management, genetic improvement of important tree species and their seed collection. NARMSAP was terminated in June 2005.

3. *Nepal Australia Community Resource Management and Livelihood Project*

The Nepal Australia Community Resource Management and Livelihood Project (2003 to 2006 July) is being implemented in two hill districts, namely Sindhu and Kabhre. The grant assistance is US \$ 10.6 million.

4. *Churia Forestry Program*

The German government through GTZ provided support (US\$ 3.0 million) to three Terai districts, namely Siraha, Saptari and Udayapur, in implementing community forestry program mainly in Churia hills. The project was operational from 1994- 2004.

5. *Nepal Swiss Community Forestry Project*

The Swiss Development Corporation (SDC) is providing grant support worth US \$ 2.7 million to implement community forestry program in three hill districts (Dolakha, Ramechhap, and Okhaldhunga) from 2000 to 2004. The project is now extended from 2004 July to June 2008.

6. *Livelihood and Forestry Program*

The United Kingdom's Department for International Development (DFID) is supporting the Forestry and Livelihoods Program (2001 to 2011) in twelve hills and three Terai districts with a grant of about US\$ 26.9 Million.

7. *SAGUN Forestry Programme*

The USAID is supporting (US \$ 2.4 million) the Strengthened Governance of Natural Resources and Selected Institutions (SAGUN) project in one hill and three Terai districts. The project period is from 2002 to 2007.

8. *Biodiversity Sector Assistance Program for the Siwalik and Terai*

The Dutch government (through SNV) is funding a Bio-diversity Sector Program for Siwalik and Terai (BISEP-ST) in eight Terai districts. The Community Forestry is one of

the big components of the programs, and it has been implemented since 2002, and will continue until 2009.

9. *Terai Arc Landscape Program*

Terai Arc Landscape (TAL) is a landscape conservation program being implemented through funding (US \$ 6.0 million) from the World Wildlife Fund (WWF) Program. The program duration is from 2001 to 2006.

## **2.9 Conceptual Framework for the Study**

The community forestry program is launched by government and its success and failure depend upon people's participation. For the present study, it has been noted that people's participation needs to be understood within the context of local culture, norms and values as well as people's knowledge and perception about their ecosystem. (Chhetri and Pandey, 1993)

The practical ingredients for protection of community forestry programs are "participation in decision making, participation in implementation, participation in benefit-sharing and participation in evaluation." The participation of people in community forest may be influenced by socio-cultural and economic condition of people and the motivational agencies, government policies, knowledge about the community forest development model etc. So, the following conceptual framework is developed and applied for this study.

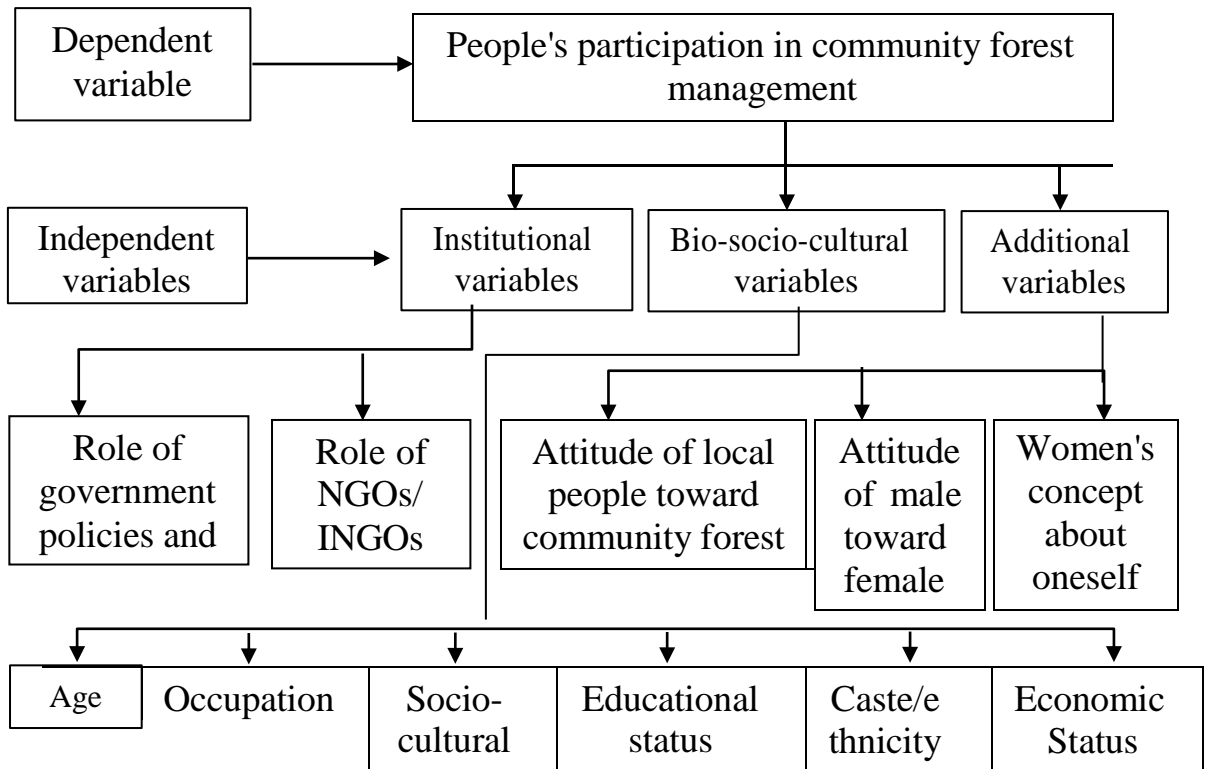


Fig. 1: Conceptual Framework for the Study

For good management of CF, different variables plays vital roles. For research work all these variables are categorized into two parts i.e. dependent variables and independent variables. Independent variables such as age, occupation, educational status, caste / ethnicity sociocultural norms and values, economic status etc have been analysed for showing relationship with dependent variables. In this research the dependent variable is “Peoples participation in Community Forest Management”.

## **CHAPTER - 3**

### **RESEARCH METHODS**

This section describes the methods used during the study; especially it discusses the study and procedures followed, site and key information selection. Since, one method is not sufficient to gather all kinds of information necessary for the study, therefore, several useful methods were used in data collection and research methods which are normally followed were adopted during the study to make it more scientific and reliable. It was ensured that findings and analyzed explanations can be subjected to empirical scrutiny and used for comparison.

#### **3.1 Introduction and Rationale for the Selection of the Study Area**

This study was carried out in Kalika Pipaltar CF community forest which lies in Dahakhani VDC in Chitwan District, located in the low land of Southern Nepal. There is Kalika Devi Temple in the side of fields of Thaklang near the village of consumer community of community forest. People worship in temple on different times such as 15th of Poush and Chaite Dashian each year. They use to sacrifice male buffalo, goat, duck and peagion as Panch Bali. The name of this forest and the community is named on the basis of this Kalika Devi Temple and Pipaltar Basti. In B.S. 1979, there was Khetbari Sude Rana and Mude Rana Maujdat. On the same time this forest area was named as Somari Forest and it is called Somari Forest till now. At the time of Tanka Rana the forest was included in Kabilas Village Panchayat ward no. 3, after the survey in\2036(B.S.). Later on Khetbari was again included in Dahakhani Village Panchayat ward no.-7.

There was no existence of Pipaltar Basti before 2041 B.S. There was the lack of cultivating land due to the floods which destroyed the farming fields of Khetbari area in 2041 B.S. Again, floods made heavy destruction in 2049. After that people came to live in Pipaltar. In year 2054, people of Dahakhani came and started to capture the land of the forest. The trend of capturing the land of forest increased gradually. The forest became easy to Chori/Nikashi, population growth in the area. Due to the effects of political misbalance capturing, heavy cutting of forest deforestation increased for the purpose of economic benefits of local people. The local people of the area started the trend of visiting the forest in order to conserve and guard the forest in year 2058.



A conservation committee formed & conservational works were done which is named after Suka Bahadur Chepang. In the year 2061 ward no. 7 & 8 get united to do conservative work of forest which is done under the direction of Bart Bahadur Gurung. This committee worked for one year. Again on 2062 another conservation committee formed under Resham Rana's coordination. In the year 2065, the community building was constructed by the amount collected from punishments, fine, and donations in Pipaltar. In those days, Dahakhani Forest of Dahakhani -7, was protected by the respective villagers adjoiningly. Two separate Bidhan as well as operational plan was made for Somari Community Forest and Wari Kalika Pipaltar community forest. To hand over the community forest to the community, the management work plan was made and the papers were forwarded to District Forest Office Chitwan. And the community forest Kalika Pipaltar was handed over to local users officially by the District Forest Office Chitwan at 29th of Bhadra 2067. Thus, the organizing, registration and transfer to the community was implemented. After that black marketing of forest products were controlled. The forest became safe from fireworks, grazing cattle, deforestation etc.

This community forest is located on Dahakhani VDC i.e. 13 km. North East from Ganeshthan Chowk of Bharatpur Municipality, Chitwan District. Most of this community forest falls on south west "Mohada". Its slope is 0 to 30, which is more than 50%. There are different kinds of small rivers, like Bhoti Khola, Rani Khola, Adheri Khola, Syangkhati Khola, Kursimal Khola, Haripur Khola, Dhamili Khola, Pangre Khola and Kala Gairha etc. and so many very small water resources. Usually, in rainy season floods comes in these seasonal rivers and in rest of the times they are dried. This site was purposively selected for the following reasons:

- a. The area was found more appropriate for the research activity focusing on participation of both sex and their role in CF management; and whole population of the area can be study rather than taking samples as the number of household users involved in the CF are just 89.
- b. Till now no study has been carried out in the area regarding people's participation in forest management process.
- c. The study area is more suitable for the researcher in economic point of view as the researcher being the permanent resident of Chitwan district.

### **3.2 Research Design**

This study has adopted exploratory cum descriptive research design. The study has been exploratory, as it has tried to deeply explore the reason behind level and factor of participation in community forest by forest users. Similarly, the study has also described the nature, origin, composition and history of community forest, which is very based on descriptive research design.

### **3.3 Nature and Sources of Data**

Being exploratory cum descriptive research, both quantitative and qualitative data have been used for the purpose as per the need and availability. Similarly, for the sources of information both primary and secondary data have been analyzed. Primary data are collected during the field study through the help of household survey of respondent, focused group discussion; interview with key informants and participants observation whereas secondary data are collected from previous studies, published documents. Related literatures from concerned libraries, range post are brought under scope of research.

### **3.4 Universe and Sampling**

This research has made study of whole population as there are just 89 household users in Kalika Pipaltar Community Forest, so far having the population of 509. So, all FUG households has been studied rather than choosing samples. Among the total population of the study area, a total of 89 including 21 women and 68 men were in the user respondent.

### **3.5 Data Collection Techniques**

Being a sociological research, the study is mainly based on qualitative data collected through methods usually adopted by sociologists such as observation, interviews, questionnaire etc. The major source of this study is a household survey based on individual / group interviews, for which the set of structured questions were used. The various tools applied for the collection of information taken are as follows:

### **3.5.1 Household Survey**

It is the major source of information for this study, mainly for quantitative data. Interview schedule are based on semi-structured type on the basis of which individual and group interviews have been carried out. Interview schedule were filled with the facilitation of researcher but for those who were educated are given the interview schedule to fill by themselves. Researcher has approached users visiting every household and socio-economic data like total users, caste and ethnic composition, educational status, occupation, livestock type, etc. are collected for the study.

### **3.5.2 Observation**

Direct observation was applied to find out and describe the socioeconomic status of FUG and their participation in forest management activities. Observation is one of the basic and powerful techniques of data collection. Information was collect through this techniques about overall activities, working condition, physical appearance and behaviors of CFUG. The researcher attended one of the user committee meeting as an observer. Participation of women and their activeness in the meeting was also observed. Fire storage, fire wood consumption, feeding materials of domestic animals, agricultural practices were also observed. Observation was made during rapport building and informal discussion with users. The observation helped very much in understanding the field reality which was fruitful for the study that could not be captured through verbal discussion.

### **3.5.3 Focus Group Discussion**

Two focus group discussion has been carried out with the members of community to discuss over the research issues. One group discussion was held in a house of one of the member of FUG. Through this discussion information about people's participation in community forest management in general and motivating and hindering factors of women's participation in particular were collected. Another group discussion was held in a tea shop which helped to collect information about socio-cultural practices in the study area. Triangulation is done with key people who are more familiar with the concept and use of community forest to validate the information collected.

### **3.5.4 Key Informants Interviews**

Among others, especially key informants like community leaders, social workers, local forestry staffs, teachers and other influential persons have been interviewed informally for this study. In addition to this 10 informants from different backgrounds have been selected as key informants. The informants were teachers, local leaders, social workers and forest committee organizers. The interview checklist did not limit the discussion to issues raised by the informants but several probing questions were asked depending upon the level and the capacity of the informants. They had been interviewed mainly to verify the data collected from various sources and to add the missing points but important for the study.

### **3.6 Data Presentation and Analysis**

The data collected through various means using different tools are presented in suitable tables and analyzed by categorizing according to the objectives of the research study. A simple descriptive tool like percentage has been used where necessary. Information related to population structure, ethnic distribution, proportion of use of firewood and fodder, education status, livestock number, marital status of executive committee and other essential data have been presented in tables and finally analyzed. Similarly, the qualitative data were analyzed and interpreted descriptively making the argument in logical way

### **3.7 Limitations of the Study**

This research deals only on certain aspects of participation in decision making, implementation and benefit sharing. The finding of the research cannot be generalized for whole community forestry. Being dissertation, not a professional research, detail study was not possible due to lack of resources viz. time, budget and skill. So, generalization of its findings may not be equally applicable for other parts of Nepal.

## **CHAPTER - 4**

### **PEOPLE'S PARTICIPATION IN COMMUNITY FOREST MANAGEMENT**

#### **4.1 Ecological Setting of the Study Area**

Chitwan district belongs to the southern part of Nepal comprising two municipality and 36 VDCs. The total population of Chitwan according to 2068 census is 579,984 consisting of 279,087 (48.5%) male and 300,897 (51.5%) female. The district comprises of total area of 2,218.km<sup>2</sup> with total households 132,462 and average family size 4.38. A majority of the people in the district (94.7%) is Hindu, 3.35% Muslim, 0.6% Buddhist, 0.25% Christian and smaller shares still of other religions (0.10%). The major cast of the people are Bahun, Chhetri, Thakuri, Gurung, Magar, Tamang, Newar, Sarki, Kami, Damai, Tharu, Musalman. In the district the major language spoken are 69% Nepali, 2.3% Newari, 1.5% Magar, 12.2% Tharu, 2.9% Gurung, 1.2% Darai, 2.6% Chepang, and 5.2% Tamang. The major festivals are Dashain, Tihar, Chat, Teej, Ekadashi, Poush 15, Maghe Sankranti, Lohsar, Fagu, and Christismas. (Source: Chitwan District Profile, 2013).

Bharatpur is the major developed city which offers good facilities on school, offices, health services, hotels, transportations and many more. History suggests that Chitwan name was originated from Sanskrit according to which it means the heart of jungle. Chitwan has a dense jungle full of different spices of plants, birds and land animals. The famous Chitwan National Park is a home of some rare birds, reptiles like Pythons, Crocodiles and cats species like tigers, leopards. It also home to one horned rhinos. This park provides a package tour (elephant ride, jungle safari) etc., with different local and foreign cuisines in the numerous hotels and resorts around the place. (Source: Chitwan District Profile, 2071/072)

##### **4.1.1 Population Composition**

A total of 509 populations including 259 female from 89 households in the study area were taken into consideration. This research undertakes the study of whole population rather than mere sample households, so all 89 households are brought under the scope of the research. One respondent from each household were approached in connection to data collection for the study.

#### 4.1.2 Age and Sex Composition of Respondents

Age and sex structure are major characteristics of a population which directly affects the economic activities. The economically active population and dependency ratio are also decided by age sex structure of population. Higher number of dependent population may suggest the higher burden for active population along with more burdens on the resources. The development or progress of a society is dependent on its active and healthy population.

**Table No. 4.1**  
**Sex Composition of the FUG**

S.No.	Sex	Kalika Pipaltar CF	
		No	%
1	Male	68	76.4
2	Female	21	23.59
	<b>Total</b>	<b>89</b>	<b>100</b>

*Source: Field Survey, 2016*

Among the total 509 population in the study area, a total of 89 including 21 women were in the user respondent. The table no. 4.1 shows that although the representation of females is considered to be very essential, there is less female participation in the user groups. The data shows that female membership is limited to 23.59 %. Female respondents are limited because they are always involved in household work so they cannot maintain the double burden inside and outside. Due to the lack of knowledge about CF, some social barriers made by men. And females are hesitate to response researcher's questions.

**Table No. 4.2**  
**Age of the FUG**

S.No.	Age group	No. of household by FUG			
		Number of respondent from Kalika Pipaltar CF			
		Female	Male	Total number	%
1	20-29	5	12	17	19.1
2	30-39	13	24	37	41.57
3	40-49	3	16	19	21.34
4	50-59	-	12	12	13.48
5	60-69	-	4	4	4.49
	<b>Total</b>	<b>21</b>	<b>68</b>	<b>89</b>	<b>100</b>

*Source: Field Survey, 2016*

The table no. 4.2 shows that there is no any user respondent less than 20 years of age. Among 20-29 ages only 17 user respondents appeared. Almost 81% user respondents in the Kalika Pipaltar FUG are of middle aged and above i.e. 30-49 years because they have major responsibility to fulfill their family needs. For that purpose they have to do different works. Most of them are depends on agriculture and forest. Women of middle age are the major collectors of forest product i.e. fuel wood, fodder, medicinal herbs and leaf litter. So, they have knowledge about forest resources and its efficient use. Male of middle age have also more knowledge about forest product and their management due to the participation in community forestry management program. No any respondent are below 20 years because they are busy in their study and other activities.

#### 4.1.3 Family Type

A family is a basic unit of any society. It is the most basic social institution. Almost every one belongs to a family either by birth or affinity. Both nuclear families and joint families were commonly found on the study area; few extended families were also existed. A nuclear family consists of father, mother and unmarried children, while joint families constituted of grandmothers and grandfathers, father and mother, married sons and their children. In Kalika Pipaltar CFUG, among 89 HHs, 49 were nuclear and 40 were joint family. Due to the effect of urbanization, joint families are going to be nuclear families in this study area.

**Table No. 4.3**

**Family type of respondents**

<b>S.No.</b>	<b>Family type</b>	<b>Number of respondents</b>	<b>percentage</b>
1	Joint Family	40	44.94
2	Nuclear Family	49	55.06
	<b>Total</b>	<b>89</b>	<b>100</b>

*Source: Field Report, 2016*

#### 4.1.4 Caste and Ethnic Composition

Nepal is a small country with multi-caste and multi-ethnic composition. In the study area, a total of 15 castes were found that included Brahmin, Chhetri, Magar, Chepang, Gurung, Biswakarma, Bhujel, Nagarkoti, Pariyar, Baniya, Praza, Gura, Guna, Tamang and Newar.

**Table No. 4.4**  
**Caste/Ethnic Composition of the Households**

S.No.	Caste/ethnicity	Total No. of HHs	Total Populations	Female	Male
1	Chepang	22	124	157	67
2	Gurung	19	109	53	56
3	Magar	13	77	43	34
4	Tamang	10	52	24	28
5	Praza	7	43	27	16
6	Biswakarma	5	29	16	13
7	Bhujel	4	30	20	10
8	Chhetri	2	9	4	5
9	Brahman	1	5	1	4
10	Nagarkoti	1	8	3	5
11	Pariyar	1	5	3	2
12	Guna	1	4	1	3
13	Gura	1	6	4	2
14	Newar	1	5	2	3
15	Baniya	1	3	1	2
	<b>Total</b>	<b>89</b>	<b>509</b>	<b>259</b>	<b>250</b>

*Source: Field Survey, 2016*

This table no. 4.4 shows that there are 15 castes in the study area but Janajati's families are more. Among them Chepang occupies 22 HH, Gurung 19 HH, Magar 13 HH, Tamang 10 HH, Newar 1 HH, Brahman 1 HH, Chhetri 2 HH, Bishwakarma 5 HH, Bhujel



4 HH, Nagarkoti 1 HH, Pariyar 1 HH, Baniya 1 HH, Praza 7 HH, Gura 1 HH and Guna 1 HH. There are 65 household of janajati, 17 dalit and 7 household of upper cast. Dalit and Janjati household have much area of land and they dependent on fully agriculture in that area. This society is dominated by rich families.

#### 4.1.5 Education Status

Education plays a vital role in human life as it is an effective instrument in developing the quality of life and society as a whole has significant effect on socio-economic development of a society. The table below shows the educational status of the study area:

**Table No. 4.5**  
**Literacy Rate of the FUG**

S.No.	Level of Education	Respondents (FUG Members) of Kalika Pipaltar CF			Percentage
		Female	Male	Total	
1	Illiterate	3	15	18	20.22
2	Literate	10	23	33	37.07
3	Under SLC	3	10	13	14.6
4	SLC	5	11	16	17.97
5	+2 Level	-	6	6	6.74
6	Batcholor Level and above	-	3	3	3.37
	<b>Total</b>	<b>21</b>	<b>68</b>	<b>89</b>	<b>100</b>

*Source: Field Survey, 2016*

Above table no. 4.5 shows that out of total respondent there are 20.22 percent illiterate people, 37.07 percent literate people, 14.6 percent of under S.L.C. people, 17.97 percent of S.L.C. passed people, 6.74 percent of +2 level passed people, and 3.37 percent of Batchalor level passed people. This table also shows only 5 female respondents are passed S.L.C., 3 are under S.L.C., 10 are literate and 3 are illiterate. No one female respondent are passed above S.L.C. Due to patriarchal social structure of this study area gender based barriers, gender discrimination are exists. Women have less access to higher education, training and extension. They are neglected in any kind of decision making process.

#### 4.1.6 Literacy Status of Households

**Table No. 4.6**  
**Cast Wise Literacy Rate of the Households**

S. No.	Cast	Total population	Male			Female		
			Literate	Illiterate	Total	Literate	Illiterate	Total
1	Chepang	124	33	34	67	15	42	57
2	Gurung	109	37	19	56	31	22	53
3	Magar	77	22	12	34	23	20	43
4	Tamang	52	21	7	28	15	9	24
5	Praza	43	6	10	16	17	10	27
6	Biswakarma	29	11	2	13	12	4	16
7	Bhujel	30	8	2	10	9	11	20
8	Chhetri	9	2	3	5	-	4	4
9	Brahman	5	4	-	4	1	-	1
10	Nagarkoti	8	2	3	5	2	1	3
11	Pariyar	5	2	-	2	2	1	3
12	Guna	4	3	-	3	1	-	1
13	Gura	6	-	2	2	4	-	4
14	Newar	5	3	-	3	2	-	2
15	Baniya	3	1	1	2	1	-	1
<b>Total</b>		<b>509</b>	<b>155</b> <b>(56.97%)</b>	<b>95</b> <b>(30.45%)</b>	<b>250</b> <b>(26.52%)</b>	<b>135</b> <b>(43%)</b>	<b>124</b> <b>(18.66%)</b>	<b>259</b> <b>(24.36%)</b>

*Source: Field Survey, 2016*

As per table no. 4.6 total literacy of CFUG is 56.97% (30.45% male and 26.52% female), where total illiteracy rate is 43% (18.66% male and 24.36%). Illiteracy percentage of female are more than male. Because of lack of awareness, social norms and barriers.

In the area of this CFUG there is a primary school in operation i.e. Ra. Pra. Vi. Khetbari. For the study of secondary and lower secondary schooling pupil go to nearby places such as Simaldhap and Gadas. And for the higher education students go to Ratananagar, Narayangadh or Kathmandu as well. There is the concept of education level is medium.

#### 4.1.7 Occupation Background

Occupation means the way of income. Occupation of an individual decides his/her access to food, security and other opportunities. Occupation is directly linked with economy that influences livelihood of an individual and his family. Occupation distribution of the respondent is shown in the table no. 4.7.

**Table No. 4.7**  
**Distribution of FUG by Occupation**

S. No.	Occupation	No. of respondents of FUG			Percentage
		Female	Male	Total	
1	Agriculture	11	56	67	75.28
2	Agri + Wage labor	6	5	11	12.35
3	Agri + Service	-	6	6	6.7
4	Agri + Business	-	1	1	1.12
5	Tailor	4	-	4	4.49
	<b>Total</b>	<b>21</b>	<b>68</b>	<b>89</b>	<b>100</b>

*Source: Field Survey, 2016.*

Majority of people have taken up agriculture as their main occupation and major source of income. However, the survey conducted among 89 people (respondents) showed that people were engaged in other types of economic activities as well. Around 12.35% of them were engaged as wage labors besides agriculture. Similarly, 6.74% were involved in service sector with their active involvement in agriculture. Likewise, 1.12% were into small or large business along with agriculture as their source of income. Others were involved in tailoring. So, agriculture has provided these people a strong base to get into other economic activities and strengthen social and financial status.

Agriculture is the major source of the living for most of the people in this community. Foreign employment, job, business and daily wages are other sources of earning, hatcheries, bee farming in small scale to fulfill their daily needs. The economic condition is poor in this community. About 50% of the people are unable to use their farm product for their food not more than 3 months, 20% of the people can use their production for 6 months. Only 20% of the people can use their production for 9

months and 10% are able to survive 12 months from their production. In the same time, 60% of the people uses to do labour and daily wages works for their survival.

#### 4.1.8 Livestock Type

Annual husbandry is a source of economy in this study area. Most of the people of this area have little for drought power, manure essential for agriculture, milk and meat and for sale. Animals play an important role in their socio-cultural life. In most of their celebrations they sacrifice animals and fowls.

**Table No. 4.8**

**Livestock Type and Their Distribution in the Study Area**

S.No.	Particulars	Number of livestock units
1	Buffalo/ Male Buffalo	22
2	Cow/ Oxen	228
4	Goat	667
5	Pigeons	7
<b>Total</b>		<b>924</b>

Source: Field Survey, 2016

In Kalika Pipaltar CF, the total number of livestock recorded was 924 (including goat and others) in all the households with 22 buffalo/ male buffalo, 228 cows/ oxen, 667 goat, 7 pigeon and uncountable Hen. Hen cow, pigeons and goats reared as an income generating activity in the area. Oxen and male buffalo are mainly domesticated for agricultural practices. Most of the household has at least two cows or buffalos for the purpose of milk and manure. Hen, goat are reared for meat purpose. They keep oxen for the purpose of ploughing *khet Bari*; and those who do not possess oxen, exchange the labour and oxen for agriculture.

#### 4.1.9 Firewood and Fodder Consumption

Average family size in Kalika Pipaltar CF is 5.7 and average livestock is 10.38. There are five families which have no any livestock. Average firewood consumption in *Bhari* per day is 1.46 making total consumption of 130 *bhari* per day. Likewise; the data shows that Kalika Pipaltar CF consumes fodder in average of 6 *bharies* per day making the total consumption of 534 *bhari* per day.

**Table No. 4.9**  
**Firewood / Fodder Consumption Pattern**

Area	Average family size	Average livestock size	Firewood consumption in <i>Bhari</i> per day		Fodder consumption in <i>Bhari</i> per day	
			Average	Total	Average	Total
Kalika Pipaltar CF	5.7	10.38	1.46	130	6	534

*Source: Field Survey, 2016.*

It has been seen that firewood utilization and fodder consumption differs widely from household to household depending over the family size, size of the livestock etc. Above table shows average family size of Kalika Pipaltar CF is 5.7 and average livestock size is 10.38. That means each family have 5-6 person and 10 livestock. Firewood consumption and fodder consumption depends upon the size of family.

#### **4.2 Formation of Community Forest Committee**

The first activity conducted by the people in developing their community forest in Dahakhani VDC was the formation of people's community forest committee, which was to be empowered with decision making, inviting or informing FUG members about the decision, inviting or informing user group members to join meeting, holding meetings and discussions. Several meetings were held before constituting community forestry committee. It was finalized that membership will be of two types- General and Executive.

General membership means FUG or users group and executive committee was to be formed on the basis of election by majority of general (FUG) members. Both general and executive committees were registered in District Forest Office, Chitwan. Shree Kalika Pipaltar Samudayik Ban Upabhokta Samuha has 89 households and the forest covers 200.28 hectares of land. People from inside and around Kalika Pipaltar CF are the users. There are 76 general members and 13 are in the executive committee.

As per the law, there should be maximum 13-15 executive members in the Samuha. People from different casts, ethnic groups and locations need to be elected for

executive committee. Sometime, it is also carried out by general consensus. Generally, duration of executive committee is for 2 years. Chairperson, Vice-chairperson, secretary and treasurer should be literate. If somehow 51% of general members deny accepting executive members, the committee will be dissolved and new committee will be elected for two years.

At present, Kalika Pipaltar CF holds 13 members elected in executive committee. Mr. Indra Bahadur Bhujel was elected to the post of Chairperson whereas Mr. Indra Bahadur Tamang was elected as vice-chairperson. Similarly, Ms. Santi Kumari Gurung, Mr. Prakash Magar and Tek Bahadur Gurung were elected as secretary, sub-secretary and treasurer respectively. Other executive members are Ms, Som Maya Chepang, Mr. Durga Bahadur Tamang, Mr. Tek Bahadur BK, Ms. Som Maya Magar, Ms. Muna Rana, and Mr. Ammar Bahadur Gurung.

To assist in official work, Mr. Bir Bahadur Magar and Mr. Purna Bahadur Chepang was appointed as office secretary and Mr. Som Bahadur Chepang was hired to look after community forest.

**Table No. 4.10**  
**Composition of Community Forest Users Executive Committees (Samudayik Ban Upabhokta Karya Karini Submitted) by Marital Status, Age Group, Caste/Ethnicity and Sex**

Selected Characteristics	Kalika Pipaltar CF
<b>1. Age group</b>	
21-30	2
31-40	6
41-50	4
51-60	1
Total	13
<b>2. Marital Status</b>	
Single	3
Married	10
Widower	0
Total	13
<b>3. Caste/Ethnicity</b>	
Brahmins	0
Chhetri	0
Janajati	12
Dalit	1
Total	13
<b>4. Sex</b>	
Male	9
Female	4
Total	13

*Source: Field Survey, 2016.*

The table no. 4.10 shows that 13 members CF executive committee was constituted for *Kalika Pipaltar Samudayik Ban Upabhokta Samuha*. From the study, it is seen that, in case of Kalika Pipaltar CF, out of 13 members, 2 are above 20 and 11 are above of 30 years of age and most of the members are between 30-50. It seems that the posts were prioritized on the basis of experience and age.

Most of the members are married only three are found unmarried. Married person

may have much more interest in household tasks such as collecting timber, firewood and fodder. It seems that married people have got priority. Caste wise composition of executive committee is vital in promoting participation. Equal representation is the norm of democracy, plays an important role in enhancing people participation in community forestry. In Kalika Pipaltar CF through there is higher representative from Janajati in the executive committee.

Nowadays, women participation in the executive committee is a crucial issue and it plays a vital role in the decision making. Above table shows that 4 out of 13 members are female in the executive committee of Kalika Pipaltar CF, which is just good if compared to female participation in the board of other community forests of the Chitwan district.

### **4.3 Levels of People's Participation**

Regarding this study, people's participation means the local inhabitants working cooperatively with existing local resources and sharing the benefits. It means making individuals in the community actively responsible for deciding what their problems are and what has been done to solve the problem so far. People's participation is more than a mere collection of voluntary labor.

Lohani (1980) has divided people participation in six stages i.e. conceptualization and identification, decision making, mass participation in resource mobilization, mass participation in implementation, mass sharing of benefit and evaluation and control. Likewise, Yadav (1988) has divided peoples participation into two stage namely - participation in sharing of benefits and participation in evaluation and monitoring.

Here, for the purpose of this study, levels of people participation in the community forest resource management are:

- Realization of the problem.
- Participation in decision making.
- Participation in implementation.
- Participation in management.
- Participation in benefits sharing.
- Evaluation and monitoring.



### 4.3.1 Realization of the Problem

Heavy population pressure increased deforestation if not finished the fuel wood in most of the parts in order to increase the cultivable land. This resulted in the acute shortage of firewood and fodder in the area. Massive rate of deforestation and consequently increasing in the occurrence of natural calamities in Kalika Pipaltara CF created multidimensional problems. At one time it happened that there was no fodder left for cattle. The consequences of this lead to decline of agricultural yield, decline in the number of livestock, decline in the fertility of soil due to the shortage of sung manure and further increase in natural calamities.

The decline of agricultural productivity has led to acute shortage of feeding resources i.e. scarcity of food grains. Thus, the massive deforestation and functioning of several factors had a crippling effect on the subsistence economy of the area, which created a vicious cycle as a result of which landslides are seen as the major consequence.

For the purpose of collecting the information regarding the realization of the forestry problem, several questions were asked to households' heads/respondents of Kalika Pipaltar CF. Stiller and Yadav (1979) have claimed that "Lack of consciousness" on the part of the villagers had been advanced as the reason for short fall for voluntary participation in development work. Hence, it can be said that consciousness is the outcomes of realization which is an abstract term.

The people of Kalika Pipaltar CF have greater priority for the community forestry programs realized. When variety of question were asked to the locals whether they feel that forest and forest products are available in plenty or scarce, nearby or far away in comparison to about 15-20 years ago, most of them reported before 15-20 years back they were in very good position regarding the forest resources. But the situation now is that even to collect a *bhari* of fodder or fuel wood takes half a day or more.

### **4.3.2 Participation in Decision Making**

If majority are involved in the decision making process then feeling of ownership will be developed in the people which is very important for smooth running of the activities. Unless the decision made are effective, no project can survive in a long run. So, decision making is a crucial element for the success of any project.

Women members in the executive committee have every right to make comments and decide what to do and when to do, but should in consensus with other male counterparts in the committee. This research had found that participation of locals is affected not only by those who make and implement decisions but also by how decisions are made. Also, more people get involved in the process when there is more involvement of women in the executive committee membership and their control and involvement in both the decision making and implementation phase of committee activities. From the key informants, it had been known that executive committee had always consulted the user group members before taking any decision and implementing its decision. The committee has dedicated in mobilizing more and more women participation in decision making process.

Thus, as long as the committee consults with the local people in making decisions, they also receive full support from the local people which is very essential for smooth moving of the forest management activities. So, as the existence of the committee is dependent in the support of local people, the committee member have correlation with forest user group members before making any major decisions and also in its implementation.

**Table No. 4.11**  
**Participation of People in Decision Making**

S.N.	Participants	Kalika Pipaltar CF		
		Female	Male	Total
1	Participation in deciding about community forestry formation	16	28	44
2	Participation in deciding about seedling plantation	29	41	70
3	Participation in site selection	32	36	68
4	Participation in selecting the types of seedling	32	35	67
5	Participation in nursery management	38	39	77
6	Participation in conservation and management	34	46	80
7	Participation in weeding, replantation and other activities	34	41	75
8	Participation in benefit sharing	38	51	89

*Source: Kalika Pipaltar CF Forest User Group - 2016*

From the data collected, it seems that from the inception to the stage of benefit sharing, people's participation is very active in Kalika Pipaltar CF. The consent of 44 households (16 female and 28 male) had been taken while formation of community forestry in Kalika Pipaltar CF. Regarding the seedling plantation, there was the participation of 70 (29 female and 41 male). In site selection 68 (32 female and 36 male) and selecting types of seedlings 67 (32 female and 35 male) households in have participated. In nursery management, 77 household (38 female and 39 male) have participated. Similarly, in conservation and management 80 households (34 female and 46 male) while in Weeding, replantation as well as other activities 75 (34 female and 41 male) participated. Lastly but not the least, in benefit sharing all most all households (total 89, 38female and 51 male) have participated. It is good sign of involved of women.

#### **4.3.2.1 Participation of Women in Decision Making**

In the context of Nepal, the situation of rural female is more unfortunate, deleterious and despairing compared to that of the urban counterpart that held an upper hand on decision making process. For the smooth operation of any community forestry equal participation of women members is very essential. Otherwise there is possibility that women act in an opposition to the project and plan.

The term community forestry, which is also being represented by other terminologies like people forestry, village forestry, social forestry, rural forestry and so on, involved the formation and recognition of forest users group and the development, implementation of operational plans for the management. But, in real practice it is very difficult to carry out these activities because of social issues involved. It is a reality that CF can't go a long way in the absence of the active and equal participation of women like men.

In traditional Nepali family, cooking food, collecting fodder and fuel wood, looking after grazing animals and so on are the things to be taken care of by females. Therefore, if forest resources decline, they are the first to suffer as they will have to spend much longer time for the same purpose. For the remedy of this, many women's committees have been formed in different parts of Nepal to accept the responsibility for forest management which have proved very effective.

Many researches have proved that status of women differs sharply across the ethnicities; UNO has provided culture free definition of status- based on to what extent do women compared to man has access to knowledge, to economic resources and to political power, what degree of personal autonomy to these resources permit in the process of plans, in the life cycle.

Therefore, decision making is a crucial element for the success of any development work. In the decision making process, women is very essential part and thus, should be given priority.

#### **4.3.2.2 Factors Affecting Women's Participation**

##### **a. Hindu Religion**

Hindu religion has been much biased regarding rights and duties between male and female. Male are given much priority and rights in the family while females are filled with more duties. Hindu religion has restricted many of the fundamental rights of female; they even can't speak before their husbands or any other senior male fellow in certain topics. This sharply hinders the decision making power of women.

##### **b. Economic Condition**

Nepalese women's economic activities are related mostly to household works like agricultural production, animal husbandry, collecting of fuel wood and other. Although, these works seems less productive in economic print of new but are more time consuming. Because of the poorness, a lot of time has to be devoted to earn even just two times meal. They get totally trapped in the nominal vicious economic circle for the sake of the family. And, because of it they can't provide adequate time for community forestry development. Thus, economic condition also hinders women's participation.

##### **c. Social Issues**

In the patriarchal society where male is a dominant figure, there is no use to compare the status of male and female, it is certain that males are always superior while females are termed always inferior and so is the case in Nepal. Even today, female status is not leading but a follower of male population in Nepal. There are several social factors which sharply retards the decision making power of women in this study area. In the area, dichotomy exists for females between the homes and outside which lower the participation of females in decision making.

Here, most of the decision making power lies in the male with very little left for female. But in the situation when women's spouse was outside the place have higher hands in decision making process. Regarding other caste and ethnic groups like Gurung, Magar, Tamang, etc., the status of women is much higher compared to Brahmins and Chhetris. They are nearly in similar position to men in decision making activities.

The researches have proved that female knows twice as much as male in terms of forest species and their uses. It is mainly because female are daily indulged in these kinds of activities. Women of the villages spends most of their time in collecting fodder and fuel woods from the nearby forest. Village life is much dependent on forest resources, from food to medicine. And, poor women know even more about plants. "Plants planted by males would die if women will not care" -Hoskins.

#### **d. Gender Role**

It can to be said that the participation of women members are found comparatively higher in Kalika Pipaltar CF than other community forest in the nearby location. Many male members of the study have commented that it was very difficult to generate participation of women in decision making process. But situation got changed with the time. Now, they have realized the importance of their participation in the conservation and management of the CF. The relation between male and female involved in the community forestry was found satisfactory at the researcher stay in the field.

Now women are participating in every level of operation - in decision making, implementation, management, benefit sharing, evaluation and monitoring. They have attended the level where they can suggest other members of the groups about the possible and needy steps to take for making the project more manageable regarding community forestry participation, monitoring, evaluation, benefit sharing and others.

Considering the nature of our society, gender distribution is a challenge. Gender redistribution strategies seeks to redistribute more evenly the division of resources, respectability and power between man and women, seeks to transform existing condition, existing gender relations not only through channeling resources and decision making to woman but implicitly requiring men to give up certain privilege and take on certain responsibility in order to achieve greater equity in community forestry participation and decision making procedure. In fact, deliberate efforts at gender integration have resulted in some of the most exciting signs of growth of community forestry management system on the study area.

In Kalika Pipaltar CF people's participation in CF resource management has been seen highly positive involving both male and female. Especially women in the

form of mother groups (*Aama Samuha*) which have assumed full leadership in caring out their activities related to community forestry, in construction of foot trails, fire-line etc.

The reality in the study area is that there is increasing acceptance of female's decision making role and women's status in connection to the CF management. Since women are primary forest users; their input in decision making, planning and implementation of CF resource management has been ensured through the incorporation of females into decision making position. But, even up to now, women had not completely built up the capacity to arrive at an independent regarding the CF resource management system. Most of the women executive members confessed that they feel like their husbands understand forest development and management better than them and could make more suitable decisions. This shows that, the management skill and decision making capacity of women in CF need to be further strengthen through leadership training and timely consultation process.

The existence of gender based inequality is not merely a matter of familial relationship; rather it is intertwined with caste, class, ethnicity and other social relations. In fact, women and men are embedded in specific divisions of resources and responsibilities; they are likely to have certain practical needs which reflect their institutionally ascribed obligations. So the best approach in community is participatory approach which needs to be fulfilled at any cost and in any situation.

The women's involvement in community forestry is crucial for its success. They are the equal and responsible participants, so they should not be considered in isolation; if it is done, it will certainly effect the overall community's participation and the smooth operation of forestry program. But, in the study area, there seems larger participation of both male and female members in decision making process, benefit sharing process and related other activities of community forestry program.

#### **4.3.3 Participation in Implementation**

People's participation has been looked through two angles. First people contributed for financial support in cash and second people contributed voluntary labour. A nominal amount of money was collected from the users group time to time and was used for effective implementation of pre-designed plans and programs through collective decision making process. And, at least one member from each household

contribute his/her labour voluntary for the sake of program implementation.

#### **4.3.4 Participation in Management**

Management of CF in the absence of people's participation can't be successful. Therefore, management is a very complex activity which means making individuals in the community actively responsible for deciding what their actual problems are and what had to be done in order to conserve and better manage the community forestry then merely a voluntary labour. The process of management is a very long and lengthy work which requires adequate knowledge about the matter dealt with. The process includes the stage from the beginning of community forest i.e. its formation to the stage of benefit sharing.

Management of the forest is essential not only for sustainable supply of goods and services but also to conserve the environment of the place. In Kalika Pipaltar CF community forestry management system was aimed to produce goods and services on sustainable basis to fulfill the basic needs of the community. These systems are also determined to preserve the existing bio-diversity of the place and as a result to have balanced ecosystem with basic preventions against natural calamities. Therefore, the basic objective of community forestry in Kalika Pipaltar CF communities is to be self-reliance regarding the fundamental needs related to forest.

In order to achieve self-reliance objective in the CF long term planning is essential. In the community forest, Community Forest Management plan were prepared considering the needs and aspiration of the local peoples as far as possible.

The role of communities in management activities in Kalika Pipaltar CF are as follows:

- Preparation of necessary management plans regarding the plantation of community forests with timely consultation of district forest office.
- Implementation of the prepared management plans for community forests plantation. This undertake the task of pruning and weeding, setting the minor forest offences in the community forest area, guarding the CF area, supervising, monitoring and benefit sharing.



- Timely updating the management plan. In all of these activities, people of Kalika Pipaltar CF had played a vital role in mobilizing human resources.

#### **4.3.5 Participation in Benefit Sharing**

In the participating process, if there is no equal sharing of common benefit, people can be easily disappointed with the project. At the same time, disparity will increase between the advantageous group and the under privileged side. The feeling of ownership will be developed in the people only when they share the benefits equally. Sharing of benefits from the community forestry is very essential motivating factor for people's participation. In the absence of it people's participation can't be authentic and successful.

For the purpose of study, user group members from Kalika Pipaltar CF were asked whether they have shared the benefit from community forestry equally or not, satisfied with the present condition of community forestry or not. Amazingly most of the respondents replied that they have been equally benefited from the community forest as it opens free for them during the months of December-January when they collect fuel wood needed for whole year. But, it didn't mean that they were allowed to cut down trees, they would collect the remains of dead trees and could cut down dried plants. During other times of the year, timber and fuel woods can be purchased on nominal amount i.e. Rs.50 per 100 kg. Likewise for the collection of grass fodder (*Bhuighass*) community forest was left open twice a week. The user group members are only allowed to enter the forest area and collect the grass fodder. Similarly, they had to pay Rs.5 per *bhari* of grass or tree fodder.

In addition to clear prospects of received benefits, one must consider the types and frequency of benefits that can be received from the participation. If the project can provide any types of benefits tangible or intangible, personal or communal to its participants at the shortest time, a project generates higher rates of participation from intended beneficiaries. In the case of women, such tangible benefits are the case in collecting fuel wood and fodder and in grazing animals which motivated them to participate in the community forestry committee. Similarly, in case of other committee members, the similar tangible benefits as well as many intangible benefits

as personal satisfaction through the enhancement of knowledge, linkage with higher government officials and in terms of exposure- the villager are the one, which reinforced their participation in community forest work.

Thus, frequency and types of benefits leads to greater participation. Community can make the collection of fuel wood and fodder as well as do grazing of animals. If they receive one benefit after another, their participation in community forestry work will certainly increase. In the study area, the role of women was found vital. Two women named Ms Santi Kumari Gurung and Ms. Som Maya Chepang., who were the members of forest executive committee of Kalika Pipaltar CF reported that "a few years earlier it was unimaginable to stand before a male and speak about the forest, but now women are not only speaking but also taking active participation in community forestry resource management activities". In fact, the acceptance by the majority towards the women role in a short period was another main achievement of the people's community forestry committee. It appears, clear from the study area that the length of time required before tangible benefit can assure to intend for beneficiaries affect programme participation. Shorter the time of benefit, greater will be the extent of participation.

**Table No. 4.12**  
**Proportion of Forest Product Used in the Study Area**

Forest Product \ Source	Community Forests	Private land, natural forest and others
Grass / green fodder	27%	73%
Leaf litter ( <i>Pathkar</i> )	23%	77
Fuel wood	31%	69%
House timber	39%	61%

*Source: Field Survey, 2016*

Since the study was carried out using participatory observation, field data collection was made through questionnaire distribution which confirmed the importance of community forestry and forest products. In general, each member of users group considers fuel wood and fodder to be most essential in the study area. In the area, the

contribution from Kalika Pipaltar CF community forest was 27 percent for grass fodder, 23 percent for leaf litter, 31 percent for fuel wood and 39 percent for house timber. From the study, it was clear that all the forest products were obtained not only from community forests but also from natural forest, private land and other resources. This shows that the people in the study area are by no means totally dependent on the forest products from that community forests but partially for their basic daily needs.

#### **4.3.6 Evaluation and Monitoring**

Evaluation and monitoring are very important parts of a project cycle. They are the essential factors for providing feedback to the project management regarding any corrective actions to be taken for adjustment in the policies to be made during the implementation of the project. Evaluation means the continual analysis of the project operations which include programs implementation, its effect and development impact. But monitoring is the continuous collections of necessary information on project inputs and on conditions and complementary activities that are critical to the success of the project. Evaluation includes people's perception of the implementation and management expressed in a formal gathering or on private while monitoring includes actual field investigation and collection of necessary information.

In the study area, the forest committee has duties to monitor the works of forest guard and the growth of seedling planted within community forest. In order to accomplish these works, committee members have agreed that each of them would visit the community forest area, at least ones a week, to check infiltrations, sneakers were caught red handed. Few incidents of catchment of infiltrators and sneakers were heard and seen during the time of this study.

The main objectives of monitoring and evaluation in the Kalika Pipaltar CF are:

1. Improving performance in carrying out management activities by providing timely information to management and implementation units (input and output) and implications for necessary support requirements.

2. Identifying and analyzing the problems incurred during program implementation and suggesting the possible solution for tackling the problems of the community forestry.
3. Activities of evaluating committee for improving future planning and implementation processes through :
  - Measuring community activities, effects and impacts
  - Evaluating plans concepts, assumption and models in the light of actual performance.

#### **4.4 Relation with Other Groups / Agencies and their Role Model of FUG**

##### **Range Post**

Range post can be represented as the small office or post set up by the DFO in order to check, maintain and develop the forest area in determined place. Range post is responsible for development of the forest areas by carrying out various activities under the guidance of DFO.

Regarding the study area, in the beginning when the local people met the ranger, he encouraged them to form FUG in this area (i.e. Kalika Pipaltar CF). The locals were motivated by the good behavior and support of Haripur Range post, it is because he and his team have carried out door to door visit in the household of local residents with the view to motivating them regarding community forestry program. Therefore, the relation between FUGs and range post is positive and cooperative since the inception of Kalika Pipaltar CF

Many respondents of Kalika Pipaltar CF told the researcher that ranger and other officials of the Range post had helped them a lot ever since the inception of community forest. People still remember the words of one ranger who was there before the formation of Kalika Pipaltar CF had said "if the local people would help me in one way or another regarding the forest resources, he would stay forward and help to form a community forest here." All respondent agreed range post contribution for establishing the CF and FUG.

Range post is helping FUG in following ways:

1. Being in regular touch with FUG.
2. Conduct FUG training regularly.
3. Sending staff in general meeting of FUG.
4. Providing the plants if FUG demand.
5. Monitoring and evaluating their work and giving necessary suggestion to them.

At present there are several community forests being facilitated by Haripur range post. All the forests are equally treated and helped by the range post. So, all the FUGs are happy with the work of range post including the one studied in this research.

Range post is also working as a bridge between users group and government projects in the study area. The range post is helping to the user group by making them know about forest policy, rules and regulation etc.; while the users of these FUGs are getting facilities like income generation programs, training, capacity development, etc. from the governmental projects. The people of this area are getting benefited from both the activities of range post and other governmental projects.

To increase the women's participation in the process, staff of range post have attended in every general assembly and informed about gender issues. They awarded the people about equity, benefit sharing and decision making. Most of the times, after carrying out the general meetings, staff of range post used to discuss with women. Particularly in groups to encourage them to participate in the decision making process.

Till now there are no particular organizations (NGOs and INGOs) dedicated to support the FUGs in the study area. The first activity conducted by the people in Kalika Pipaltar CF (in 2067) was the formation of people's community forest committee and that was to be empowered with decision making, informing FUG members about the decision made and inviting user group members to join meeting, holding meeting and discussions. Several meetings were held before constituting community forestry committee. It was finalized that membership will be of two categories:

- **General or Ordinary Members**
- **Executive Members**

The general membership means simple members of FUG or users group while executive committee was to be formed on the basis of election among general (FUG)

members. Both the general and executive committee are been registered in District Forest Office, Chitwan.

The forest committee formulated rules and regulators regarding the use of community forests. To enforce these rules, the committee penalized offender in the presence of local leaders. Therefore, the community forest committee is the very important organization at the level of users group for shouldering the responsibility of forest protection, management and distribution of forest products.

## CHAPTER - 5

### SUMMARY AND CONCLUSIONS

This chapter summarizes the major findings of the study and draws conclusion about the people's participation in forest management. Finally, it tries to recommend some steps or suggestions for holistic development in the study area.

#### 5.1 Summary

Although, there exist several community forests in Dahakhani VDCs of Chitwan, the universe covered in this study composes 89 Households around Kalika Pipaltar CF that inhabits 509 people at present. Instead of taking samples, all 89 households (FUG) were taken into consideration for study purpose. Both qualitative and quantitative information have been collected during the study. Research design used in this study was exploratory cum descriptive in nature. For collection of data, interviews with male and female of FUG, members of executive committees as well as with key informants like teacher, ranger, social workers etc. was carried out. Similarly, participatory observation and focus group discussion was done. Most of the data for the study was collected from Poush to early Magh 2072, but since then frequent visits were made time to time.

The growing population size, increase in frequency of natural calamities, increasing shortage of forest resources due to increasing use of forest for fodder, fuel wood as well as timber for commercial purpose, and worsening environmental condition raised the consciousness among the local people of the area to participate in conservation and maintaining the existing forest resources. This give rise to the formation of Kalika Pipaltar CF and with the passes of time community forestry became the survival strategy for the people living nearby the Kalika Pipaltar CF to overcome the problem of deforestation and depleting environment.

Before few decades, there was dense forest in the place where Kalika Pipaltar C.F is now, even leopard, deer, bear and different types of birds use to habitat. These were Sal, Asna, Sisso, Sandan, Karma, Satisal, Bijaysal, Siris, Tuni, Jamun and many more types of trees in abundant amount. In the meantime, some people of

the area including the new comers (those migrated recently from hills and other distant places) started to smuggle the wood and wild animals for their personal benefit following the political instability at the time. The process continued which led rapid destruction of forest. As the time passed, dense forest converted into barren lands; wild animals were slowly disappeared. As the consequence, people begun to suffer from heavy rainfall, floods, dry season and environmental degradation. Now the people could hardly hear the sound of even jackal. There was the shortage of fodder and firewood to carry out daily household activities, no wood or timber for making houses and agricultural tools; and virtually no suitable environment to live in.

Shree Kalika Pipaltar CF Samudayik Ban Upabhokta Samuha was formed in 2067 B.S. During the inception period, very few members were involved but now the Samuha consists of 89 members (one from each HH) and they are making their collective efforts to conserve, plant and manage the forest. They have planted Khayar, Simal, Gamhari, Siris, Tuni, Karma, Jamun and many more other species of trees. The plantation activity is carried out in regular basis at least once a year.

Factors that affected the participation of people in community forestry are:

- Even recognizing the importance of women's role in forest management by both male and female of FUG, they are bounded by socio-cultural traditions (conservative society).
- Leaving some instances, the participation of women is comparatively low in decision making and benefit sharing process compared to other community forest management activities.
- Biological, physical and social factors such as biodiversity, location of community forestry site, size of the forest, gender inequality and so on.
- Structural factors namely the size and composition of the committee, right and authority of the committee; decision making and implementation are equally salient in determining people's participation in community forestry.



- Lack of education in women decrease the level of women's participation, and they are made responsible mostly for forest related activities like plantation, weeding, harvesting and guarding.
- Political and administrative factors - in this case local politics and administrative works in the areas as well as national level political environment also determines the extent of participation in community forest activities.

## **Main Findings**

### **A. Socio-economic status of FUGs members of the study area**

In sex composition of user respondents these were 76.4 percent male and only 23.59 percent female in Kalika Pipaltar CF. In age composition of user respondents, it is seen that most of the members (81%) have much area of land and they dependent on fully agriculture in that are in middle age and above i.e. 30-69 years. Among total 89 households in Kalika Pipaltar CF 49 are Nuclear family and 40 are of Joint family. High tendency of nuclear family is found. In caste and ethnic composition, total of 15 castes were found in total households of the study area. Dalit and Janjati households' area. Education status of user respondents showed that there is around 80 percent literacy that includes they percent with nominal education, around 14 percent under S.L.C. and 18 percent above S.L.C. Very few have attended higher education. Illiteracy percentage of female are more than male. Because of lack of awareness, social norms and barriers. The major occupation is found to be the agriculture which is comprised of around 76 percent while Agriculture and wage labour was found to be around 13 percent. People of the study area possessed different types of livestock like cow, oxen, buffalo, goat, pigeons, hen, etc in big numbers.

### **B. Level of People's Participation**

The level of participation of local people in different activities of community forestry management was seen as:

- Participation in deciding the formation of Kalika Pipaltar CF was around 49 %.

- Participation in deciding about seedling plantation was 78 %;
- Participation in deciding about site selection was 76%.
- Participation in Nursery Management was 75%.
- Participation in selecting the types of seedling was 86%
- Participation in conservation and management was 90/90%.
- Participation in weeding and re-plantation activities was around 84%.
- Participation in sharing of benefits was 100%.

**C. Women participation in community forestry management** is seen very good as there is 39% women in executive committee of Kalika Pipaltar CF But when all FUG members are concerned there are 76.4 % male and only 23.59 % female members.

**There are no any NGOs / INGOs dedicated to support** the community people for effective management of forest resources. Therefore, in the area only **range post** (i.e. government agency) was responsible for conservation and development of the forest, at least at the moment.

Besides, it was found that, to keep regular trace of the community forest, the members have made a special provision of monitoring and evaluation. Committee members agreed that each of them would visit the community forest area at least one a week. Researcher found that nearly 40 percent forest users were benefited from various kinds of training programs operated by the government. Similarly, satisfactory participation and effort was seen to develop good relation with range post staffs, district forest officials particularly in information sharing as well as raising and mobilizing fund. The community forest members were also involved in different community and locality development work.

## **5.2 Conclusion**

The members of Kalika Pipaltar CF were highly participative in forest management activities. They were the one who make the decisions for the common welfare. They select the sites and contribute for infrastructure development along with the

rules for community forest protection and promotion. Plantation program which involves clearing sites, preparing pits, plantation and protecting seedling as well as pruning and thinning are well organized with active participation of FUGs. All committee members actively participate during decision making, implementation and benefit sharing process.

The forest user group holds large number of members from Janjati community. The forestry policy mentions that there should be representative of women in at least one third seat of committee and must integrate ethnic group representation in community forestry program- the finding of the study has shown that participation of women is over 50% of executive positions which is very appreciative.

Besides, the existing literature had identified several factors fostering women participation in the developmental activities. Few users are found somehow affected by their economic situation and are unable to actively participate in CF activities. Till now no NGOs/INGOs were found working in dedicated manner for the development of the communities and to support livelihood of the locals connecting it with community forestry programs and actions.

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**APPENDICES**

**APPENDIX –A**

**Interview Schedule for Household Survey:**

- 1. Household No.:**
- 2. The Respondent:**
  - a. **Name:**
  - b. **Age:**
  - c. **Sex:** Male/Female
  - d. **Occupation and Religion**
  - e. **Marital Status:** i. Married    ii. Unmarried    iii. Separated  
    iii. Divorcee    v. widow/widower
- 3. Number of Family Members:**
- 4. Detail about the Family of the respondent:**

S.N.	Name	Age	Sex	Relation to Head	Education	Occupation	Remarks

- 5. How much land do you have?**

Type of Land	Total Land	Cultivated one- self	Rented out	Remarks

- 6. What do you grow in your land?**

S.N.	Major Types of Crops Grown in 2008/9	Production	Remarks



**17. Who collects fodder/green grass?**

.....  
.....

**18. How far is the forest area?**

.....  
.....

**19. How much time does it take to collect a *Bhari* of fire wood?**

.....  
.....

**20. What quantity of fodder is needed for a day?**

.....  
.....

**21. What kinds of fodder are used?**

- a) Tree fodder (      )
- b) Green grass (      )
- c) Hey/Paddy residue (      )
- d) Others (      )

**22. How much time does it take to collect a *Bhari* of fodder/green grass?**

.....



**12. Which grass species do you collect often from community plantation area?**

- a. *Khar/Siru*
- b. *Dubo*
- c. *Karaut*
- d. Others

**13. How many *Dokos* of grasses do you need and get from the plantation area?**

.....

**14. Do you think the grass/fodder problem has reduced after introduction of forestry programme?**

- a. Yes (.....)
- b. No (.....)

**15. What species would you prefer most in future community plantation? Please name and rate in order of your preferences.**

- a. Fodder species
- b. Fuel wood species
- c. Others

**16. What is your idea for a success of community forestry plantation programme?**

- a. ....
- b. ....

**17. How rural people be benefited from the programme?**

.....

**18. Are you satisfied with the activities of users' group committee of the community forest?**

- a. Yes (.....)
- b. No (.....)

**19. Any other comments about the community forestry?**

.....

## APPENDIX –C

### **Checklist for Key Informant Interview**

#### **A. Origin and composition of the community forestry committee**

- 1) How was people's community forestry committee formed? Who decided about it? Who were present at the time of executive committee formation? How was women's representation during the time when the committee was formed? What were the reactions of women about it? Were there any problems encountered during the initial period of community forestry and during the formation of community forest committee?
- 2) Who called the first meeting regarding the formation of community forest committee? Who attended it and what were the issues discussed? How was women's participation on the committee?
- 3) Did the person involved in community forestry program have the prior experience of community forestry? If not, what were the difficulties faced during the initial period and how were they solved? What was the role of GoN and NGO officials in the formation of community forestry committee?
- 4) How were the community forestry executive committee members selected? What criteria were followed during the selection? Were the members selected for executive committee was interested to join it? What problems were encountered during the selection of the committee members? How were they solved?
- 5) What is the composition of community forestry committee by ward/location, sex, caste, religion, age, marital status, literacy and economic status? Are there any shortcomings in the present structure of the committee? How can they be solved?

#### **B. Aims of the Committee:**

- 1) What is the role of the community forestry regarding the protection and development of community forest resource? What are its specific activities? How are they implementing? Does the community forest committee have a management plan?
- 2) What are the rules and regulations of the committee regarding the use of community forest and forest products? How the executive committee has been empowered regarding the enforcement of its rules and regulations? Can the committee take any decision without consulting others? How?
- 3) What are the activities accomplished by the community forestry committee? What will be its future activities? Are there any problems enforcing community forest executive committee's rules and regulations? And, how were they solved?

**C. People's Participation in community Forest Committee Activities:**

- 1) Who of the present user group members were present during the formation of committee? What was their role during the committee formation process? What are the roles of women and how was their presence?
- 2) How were the members and chairman of the executive committee elected? Who were involved in the selection process? Who selected the forest watchers? How many women members were elected in the executive committee?
- 3) How was the site for community plantation selected? Were there any problems during the site selection and how were they solved?
- 4) How forest offences are solved? Are there any problems faced during the settlement of forest offences?
- 5) How different activities of community forestry i.e. preparing pits, clearing the site, bringing seedlings, planting, seeding and fencing the planted areas are done? Are there any problems encountered while carrying out these activities? If yes, how they have been solved?
- 6) What are the benefits received as a member of the committee? How are they distributed, when and how much? What need to be done to increase the present benefit sharing trend?
- 7) Is there any system of monitoring the activities of community forestry committee including that of forest watchers (*Banpaale*)? Who are involved in the monitoring and how has it been carried out?



## **APPENDIX –D**

### **Composition of Community Forestry Executive Committee (*Samudayik Ban Upabhokta karyakarini samittee*) of Kalika Pipaltar Community Forest:**

<b><u>Portfolio</u></b>	<b><u>Kalika Pipaltar CF</u></b>
Chairman	Indra Bahadur Bhujel
Vice Chairman	Indra Bahadur Tamang
Secretary	Santi Kumari Gurung
Vice Secretary	Prakash Magar
Treasurer	Tek Bahadur Gurung
Member	Som Maya Chepang
Member	Durga Bahadur Tamang
Member	Tek Bahadur BK
Member	Som Maya Magar
Member	Muna Rana
Member	Ammar Bahadur Gurung
Member	Bir Bahadur Magar
Member	Purna Bahadur Chepang

## **APPENDIX- E**

### **Scientific Name of Some Plants Used in the Dissertation**

<b><u>Nepali Name</u></b>	<b><u>Scientific Name</u></b>
Sal	<i>Shorea robusta</i>
Sisoo	<i>Dalbergia sisoo</i>
Khayar	<i>Acacia catechu</i>
Jamun	<i>Syzygium cumini</i>
Simal	<i>Biombax castatum</i>
Gamari	<i>Gmelina arboea</i>
Karma	<i>Adina cordifolia</i>
Siris	<i>Albizia saman</i>
Satisal	<i>Dalbergia lutifolia</i>
Tooni	<i>Toona cillata</i>
Asna	<i>Terminalia alata</i>

## PHOTOGRAPHS



Frist Picnic Spot inside Kalika Pipaltar CF (*Source: Field study 2016*)



Rani Khola near Kalika Pipaltar CF (*Source: Field study 2016*)





Second Picnic Spot inside Kalika Pipaltar CF (Source: Field study 2016)



Members of executive committee of Kalika Pipaltar CF (Source: Field study 2016)





Treasurer Tek Bahadur Gurung of Kalika Pipaltar CF (Source: Field study 2016)

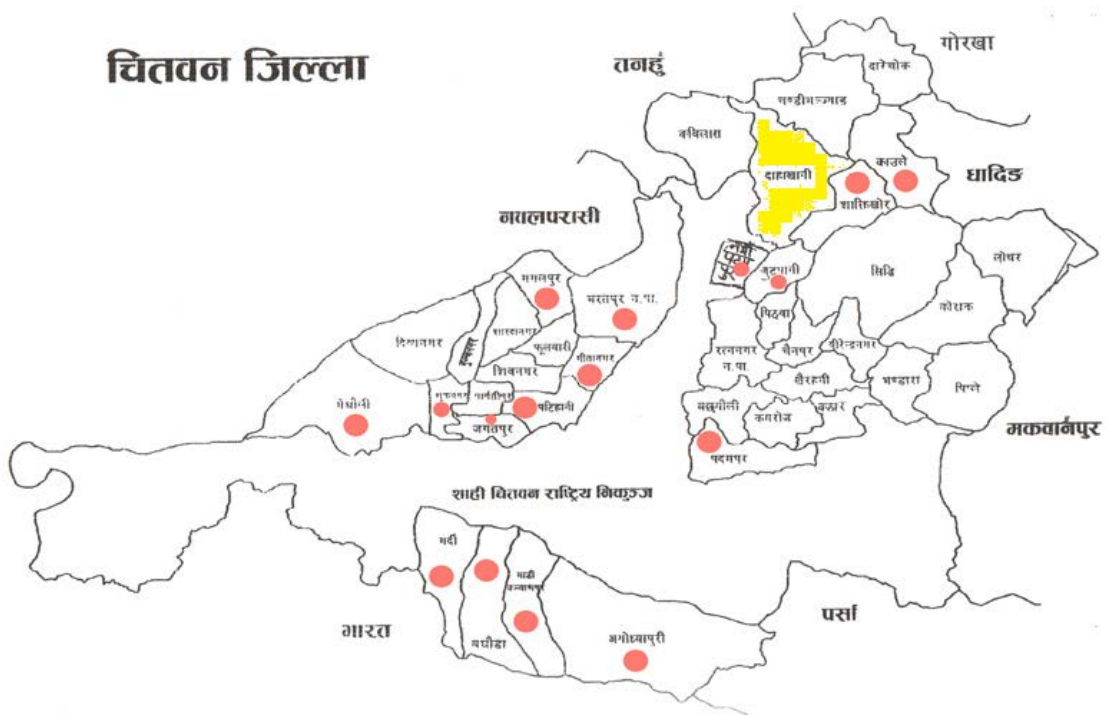


Sal trees inside Kalika Pipaltar CF (Source: Field study 2016)





Participation in benefit sharing from Kalika Pipaltar CF (Source: Field study 2016)



Map of Dahakhani VDC, Chitwan

Map of Nepal  
Highlighting Chitwan District

