CHAPTER - I

1. INTRODUCTION

1.1 Background

Situated in the lap of southern slopes of the Himalaya, it lies between the Indo-Gangetic plain in the south and Tibetan Plateau in the north. It is gifted with wonderful natural creation and is well known for its mountains, villages, landscapes, lakes, green valleys, waterfalls and great diversity of flora and fauna. Nepal is between 26^0 22' N to 30^0 27' N latitude and 80^0 4' E to 88^0 12' E longitude. Its elevation ranges from 90 to 8848 meters (Nepal in Figures; CBS, 2004). The average length from east to west is 885 km, and average breadth from north to south is about 193 km. Nepal covers an area of 1, 47,181 sq. km, which is 0.3% of the total landmass of Asia and 0.03% of total landmass of the world. The country is in between the two most populous and economically growing countries of the world, India in east, south and west and China in the north. Nepal is gifted with wonderful natural beauty with traces of art crafts. The northern range (the Himalayas) is permanently covered with snow; middle range (hills) is made of Gorgeous Mountains, high peaks, hills, valleys and lakes. The Terai is the extension of the Gangetic plains of alluvial soil and consists of dense forest area, national parks, wildlife reserves and conservation areas. In the geographic diversity and varied climatic conditions 2001 census enumerated more than 100 castes/ ethnic groups. Population projected in the year 2006 is about 25.8 million. (CBS, 2001)

Nepal presents an example of 'Unity in Diversity' throughout its history and has maintained its pride to be an independent and sovereign state. There are villages, landscape, lakes, green valleys, waterfalls and great diversity of flora and fauna. One of the principal charms of Nepal is the comparatively small country (Stainton, 1972). Nepal, being a land of topographic contrasts, provides a great inter-specific and ecosystem diversity and offers interesting ethnobiological studies.

Ethnobiology by nature is a multidisciplinary science drawn from biology, ecology and anthropology. The principal focus of ethnobiological research is to examine the dynamic relationship between human population, cultural values and living organisms. Thus, ethnobiology is more than simply a study of living organisms useful to people. It is devoted to understanding the limitations and behavioral consequences of the human action on their biotic environment. Recent developments in ethnobiology have been strongly oriented towards traditional herbal medicines, indigenously managed floral resources, traditional organization, cultural interpretation of biological world, rural development and biodiversity conservation with strong applied approaches in the field.

The mountainous and plain topography of Nepal accommodates the ethnic diversity as biodiversity. "There are around 59 different travel groups identified by the Task Force formed by government in 1996 for the establishment of the foundation for the upliftment of nationalities.

The Task Force report explains the basis for the identification of the 59 nationalities called *Janajatis*. Accordingly a nationality or Janajati as per the report's

own relevant content is that the community who has its own mother tongue and traditional culture and yet does not fall under the conventional fourfold Varna of Hindu Varna system or the Hindu hierarchal cast structure.

As per the definition of "Janajati" in the Act (2002) enacted by government of Nepal, it declares to the effect that "Indigenous Nationalities" means a tribe or community having its own mother language and traditions, rites and customs, distinct cultural identity, distinct social structure and written or unwritten history (NFDIN, 2003).

The ethnic groups of Nepal can be classified into two communities as Tibeto-Nepal tribes and Indo-Nepali tribes. The Tibeto-Nepal tribes are further divided into two subgroups Tibeto group (Sherpa, Thakali, Bhotiya, etc.) and ancient Nepali tribes are subdivided into two subgroups; Nepali groups (Brahmin, Chhetri, Thakuri, Sanyashi, etc.) and Indian group (Santhal, Jhangad, Munda, Kisan, etc.) All these tribes have their own culture, indigenous knowledge system and traditions (Hagen, 1970).

The Pahari are among 59 indigenous groups of Nepal. They are submarginalized and have permanently settled in different parts of the country including Badikhel VDC in Lalitpur district. The culture of Pahari, though controversial as one of the Newari sects, they are supposed to be a separate indigenous caste or ethnic group in Nepal. They do not have any historical record, but in some abstracts in publications from (MOLD)-NCDN by government of Nepal, it is mentioned that Pahari according to old citizens, were employed as watchmen of high status people, hence are called Pahari, "Pahara" (Nepali) meaning guard. So it is believed that since they used to guard the temples as a watchman on a rotational basis, therefore, deriving the word 'Pahari' as their caste.

Another study reveals that the Pahari were employed in the kitchens of Royal families and they used to taste the food before serving, which possibly caused illness due to dirty hands. When this reality was revealed they were exiled from the country and sent to hilly areas branding them as "Phohori" which after some time developed into Pahari (Gautam and Thapa Magar, 1994).

The report by (MOLD-NCDN, 1997) says that minority Pahari was originated from Khopasi Saldhara and Palanchok with Mongoloid origin, and are spread and settled in different parts other than Badikhel of Lalitpur district. Their mother tongue is little different with Newar and Tamang. In some cases they claim Dailekh as their original place. They are originally Buddhist, but are also influenced with Hindu culture too. Their distribution is also in other places i.e. Kodku, Kitni, Lele, Mande, Shikharpa, Chalnakhel Kathmandu, Bosan (Makwanpur), Kulekhani and rarely in Sindhupalchowk. They have started migrating to the urban areas quite recently.

1.2 Ethnogeographic setting

Though the dispersal of Pahari ethnic group is seen mainly in the Badikhel VDCs ward no. 4, 5, 6, 7 and 8, most of them are engaged in agriculture and cottage industry as they are traditionally skilled with bamboo craftwork.

Pahari cultural background is controversial-whether they originated from Tamang or Newar and also about their original place. The settlement of major Pahari population is found in Badikhel VDC of Lalitpur district. Their culture and tradition

is very similar to that of Newars, but little different in social association. The Pahari people are not localized in particular areas as their population is dispersed in different areas. The original home place of Pahari is Dolalghat VDC, Satthighar, Koshipari (200 homes), Baskot, Simle, Saming, Salle, etc. in Sindhupalchowk, Lamsanghu, Kathmandu and Lalitpur- Chhampi, Sikharpa, Badikhel, Pare, Lele, Godawari, Dukuchhap, etc. Pahari here are engaged or found involved in making the artistic goods as Doko (big basket), Nanglo (flat round bamboo craft), Dali (small basket), etc. The family system is extended type (joint family), but recently nuclear family system has been practiced by educated people (Gautam and Thapa Magar, 1994).

The females are much honored and respected as they are matriarchal in origin. The Pahari language is classified within the Tibeto-Burman family closer to Newari (offshoot language), but no written separate script is available. Today, Pahari language is not used frequently by them and is in the fading phase, through disuse (Gautam and Thapa Magar, 1994).

The external physical appearance is similar to Tamang ethnic group with shorter body, stocky, robust, dark skin (few fair-skinned), males with scanty facial hair, and brown to black eyes. The dress by women is *phariya* (frock), *cholo* or blouse (similar with Tamang and Jyapu ethnic group); males with *bhoto* (vest-like clothing) or *daura* and *suruwal* (Nepalese male dress) and waist coat, but nowadays they wear modern dresses too, switching over more practical and modern pants, shirts and even slippers. Women pierce nostrils after marriage, wear *sindur-pote* (vermillion-necklace*)* and *tilhari* (necklace) or ornaments made up of silver and gold.

1.3 Rationale of study

Indigenous and ethnic groups in Nepal are at the cross road of development. For example, no individual and communities in this 21st century are without the hegemony of modernization and developmental obligations. Changes in environment, for instance climate changes, degrading soil fertility and loss of vegetation which all are a common phenomenon have deeply affected the ways of people. Geopolitically, such minor communities are either in suppressed form in policy-making or are confined in rural and remote areas. In order to bring them in main stream of development, we need to have a detail study of such ethnic communities which are dispersed in various parts of the country. Due to migration, these segregated populations are to be studied in their respective place of settlement.

But, there are scanty studies not only about Pahari's distribution across the country, but are almost not intensively studied about their ways of living from ethnobiological perspective. Like others, being influenced by rapid urbanization, the Pahari have modified their lifestyle, language, knowledge, cultural tradition, innovations, spirituality, and farm management practices. In this regard, this study provides baseline information about their population and documents both the flora and fauna available in Badikhel VDC and the ways how they are utilizing. In addition, this study put forwards the recommendations with reference to sustainable community development and conservation of biodiversity. This study is directed to help maintain the documentation of various plants and animals used by Pahari with their indigenous practice and knowledge.

1.4 Objectives

The ethnobiological study of Pahari has to be disclosed with its own identity and this sort of effort is essential for marginalized groups in Nepal. The main objectives of ethnobiological study of Pahari people are as follows:

1. To collect the baseline information on plants and animals (both wild and cultivated species) used by Pahari of Badikhel VDC.
2. To shed light on ethnography of the Pahari and their way of life. Besides ethnobiological interest, it is also aimed at increasing the interest of those concerned with their welfare.
3. To study the medicinal value of plants and animals used by Pahari.
4. To understand the threats envisaged by the Pahari for the preservation of ethnic identity and survival.

1.5 Assumptions of the study

The research study has been carried out with the following assumptions.

1. Pahari people are totally dependent on the bio-resources for livelihood and daily needs.
2. They use cultivated/domesticated as well as the varieties of plants and animals for the fulfillment of their basic needs.
3. The distinct culture is the use of plants and animals for different purpose in different ways.
4. The traditional way of curing and treatment of various ailments is extracted directly from natural resources.
5. There is overexploitation of certain bio-resources due to ignorance and socio-economic pressure, hampering conservation efforts.
6. The research study on Pahari ethnicity group on their historical, socio-economical and cultural aspects as well as ethnobiological are scanty or rare.

1.6 Limitations

This biological study of ethnic group Pahari is possibly the first one in terms of its extent. The limitations of the ethnobiological study of Pahari are as follows.

- The detailed and pondered study over the different aspects could not be made due to limited time and resources.
- The study had to be completed within a shorter period of time, to be submitted as a thesis on time.
- There was no financial support from anywhere of any kind, and the study had to be conducted on one's own effort and finance.
- The focus of the study was mainly on documenting plants and animals being used by the Pahari.
- The study was made in one VDC and with a limited number of people within the area made the study more isolated without the study of any other/similar indigenous people in other parts of the country.

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CHAPTER II

2. LITERATURE REVIEW

Rural communities and biodiversity are essential basis for sustaining human life (Earth Summit, 1992). The modern concept of biodiversity conservation in community level in the decentralized manner with the indigenous knowledge of the different ethnic groups and tribes needs to be documented with traditional and indigenous techniques and practices in terms of medical, agricultural and community forest use. The medicinal practices including herbal plants and animals have significant values for biological field of studies. There can be great support to the medical science with the documentation of indigenous knowledge, and future learning will be easier for sustainable ways of existing-in harmony with nature (Manandhar, 2000). The term ethnobiology was coined in research by Edward F. Castreller in early 1935. The ethnobiological study without following different literature from wide disciplines is difficult and inconvenient.

Ethnobiology is a branch of biology that deals with relation between human societies and their surrounding environments. Webster's Third New international Dictionary (1966) quotes that the word ethnobiology can be divided into two parts ethno and biology. Ethno derived from the Greek word 'ethnos' which refers to the human aspects in biological relationship, between human cultures and other living organisms and has been further developed as a concept encompassing relationship between contemporary biology, anthropology, and ecology. (Shengji, 1991)

Ethnobiology is defined as the innovative branch of science, which deals with the study of various uses of biological resources in relation to the human beings. It is an interrelationship and interdependency between particular human tribe and the biological resource in the given region. Ethnobiological basically encompasses tripartite relationship among anthropology, biology and ecology. It also deals with the various impacts of socio-economic and demographic changes on the biodiversity. (Singh, 1995)

Likewise it is the knowledge related to cultural traditions, innovations, spirituality and management practices of farmers and other rural communities concerning biodiversity and sustaining human life (Earth Summit, 1992). It is the branch of biology that deals with the relation between usually primitive human societies and the plants and animals of their environment is called ethnobiology (Webster's third new dictionary Vol. I, 1966, p.781).

Following the common practices that have been taking place throughout the history of human civilization, every ethnic group, for example Pahari, in rural areas of the country is greatly utilizing the bio-resources (plants and animals) for various purposes in different phases of life; the food habits, dwelling places, agriculture, hunting, healthcare and in fact all aspects of life depends on the surrounding vegetation. The Pahari are one of the minority ethnic groups in Nepal. They use surroundings' bio-resources for various purposes; food, medicines, building materials, fuel, furniture, etc., using their traditional indigenous knowledge, due to lack of modern facilities, illiteracy, poor economic condition. So, Pahari people are rich ethno-biologically. The bio-resource is disappearing very rapidly due to rapid population growth, limited field for agriculture, natural disasters, etc. The knowledge about bio-

resource uses of Pahari tribe gives the actual condition of the bio-resource management and preservation of indigenous knowledge.

Even though there were studies made on ethnobotany, ethnozoology with other discipline as in ecology, economic botany, sociology and anthropology before their time, this there were no clear evidence about the ethnobiological researches made by any one. For example, Bista, (1967) is the first scholar to draw and highlight ethnographic map of Nepal as "Peoples of Nepal" in a short and general way.

Though our communities have been greatly relied on local biodiversity since ancient time, study from ethnobiological perspective is newly emerging practices in Nepal. For instance, Manandhar (1990) carried out an ethnobotanical study on traditional medicinal plants among Chepang, Magar, Tamang and high community from different areas of Chitwan district and documented 74 medicinal plants treating 24 diseases. Manandhar (1999) studied on the Tamangs of midlands recording 952 plant species with different medicinal importance. Sapkota (1994), in his ethnobotanical study from Palpa district documented 48 plant species curing 39 diseases. Rijal (1994) researched on ethnobotany from Padampur VDC and Chitwan National Park of Chitwan district and documented 185 plant species of medicinal importance curing 126 different diseases. Singh (1995) has studied the ethnobiology of Raute and reported 48 different animal species and 188 plant species for various needs. Manandhar (1995), in his ethnobotanical study recorded 60 plant species for different 25 diseases from Jajarkot district. Chhetri (1996) enumerated 160 plant species of Limbus utility from Panchthar district. Dhakal (1997) in his ethnobiology of Kumals from Gorkha recorded 58 plant and 12 animal species of traditional medicines used in different health disorders. Thapa (1998) documented 113 plant species with different utility from Shivapuri Watershed and Wildlife Area of Kathmandu. Basnet (1998) from Sindhuli district documented 102 medicinal plants useful in various ailments. Kaundinya (1998) in his ethnobiology of Kumals, Chirtungdhara VDC of Palpa district listed 47 animals and 195 plant species for various uses. Tamang (1998) from Gorsang VDC of Nuwakot district listed 183 plant and 13 animal species. Nepal (1999), in his ethnobotanical study of Rai and Sherpa from Makalu Barun National Park documented 142 plant species including 60 species with medicinal importance. Ghimire et.al. (1999) made study on ecology of some high altitudinal, medicinal and aromatic plant from Gyasumdo valley of Manang district. Ghimire (1999) listed 223 medicinal and aromatic plant species of Nepal Himalaya. Upadhyaya (1999) in his ethnobiological study of Bote (Majhi) has listed 58 animals and 214 plant species from Gulmi district. To illustrate a few more literatures those are relevant to this study, Manandhar (1990) studied on Danuwars of Siwalik Hills which documented plants used traditionally for medicinal purposes was primarily the first of it's kind from tribal perspective. They all are considered to be pioneering academic endeavours of 90's decade in Nepal.

Some more studies those based on socio-cultural aspects are made by different scholars as The Tribal Ethnography of Nepal (Gautam and Thapamagar, 1994) has reported the socio-cultural aspect of Pahari in general. Mali (1982) made a study of the Pahari dialect and has published the book *Pahari Bhasika Chhagu Adhyayan*.

Malla (1997/98) has made sociological study of Pahari people in Badikhel VDC of Lalitpur, and prepared thesis for M.A. from T.U. To take a few other examples, Pokhrel, (1999/00) has made sociological study about socio-cultural status of Pahari and Rana, (2002) has made a sociological study on recognition of ethnic

and gender identity of Pahari female of Badikhel VDC, Lalitpur both were the academic (thesis) studies for their master's program at T.U. Beside this Thapa, (2000/01), has published a detailed investigation on Pahari ethnicity, Kathmandu: (NCDN, 2000). Similarly Ukyab and Adhikari (2000) mentioned on various socio-cultural aspects of Pahari as subtitle "Frin" (NCDN, 2000, pp.26) and also published second volume (NCDN, 2000 b) about Pahari.

The study made by Gautam and Thapa Magar, (1994) about Pahari, Singh, (1995) has studied the ethnobiology of the Raute and reported 48 different animal species and 188 different plant species for various needs. Dhakal, (1997), in his study of the Kumals of Gorkha district, has reported 62 animals and 264 plant species used by the people.

Manandhar, (2000), in his ethnobiological study of Chepangs of Makwanpur district, has documented 127 different animal species and 354 different plant species used by them for multiple purposes in their needs.

Similarly, Thapa (2000), Ghimire et.al. (2000), Ghimire (2000), Karki (2001), Parajuli (2001), Ghimire and Thomas (2004), Gautam (2002), Gurung (2002), Gurung (2003), Karki (2003), Koirala (2004), Dhakal (2004), Shrestha (2005), Ghimire et.al. (2005), Joshi and Joshi (2007) are attempts in the field of ethnobotanical well as ethnobiological study.

So far the concern and scope of this study, it will shed light on how Pahari are overexploiting certain bio-resources due to ignorance and socio-economic pressure, hampering conservation efforts. Thus this study on Pahari ethnic group on their historical, socio-economical, cultural as well as ethnobiological aspect shall be contributing to add an academic resource in the future which was scanty or rare in the past.

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CHAPTER III

3. STUDY AREA

3.1 Study area

The Badikhel VDC (Map 3) of Lalitpur district (Map 2) is in Bagmati zone of Central development region is the study area. I selected this VDC, which is near to Kathmandu where I live in with my family, for two reasons; to make study more feasible because we need frequent visits to study sites while studying by using ethnographic tools, and to reduce the biases that can be caused due to time and budgetary constraints as I carried out this study affording myself with no any external; financial support.

It is situated in the southern part of Kathmandu valley. It lies in $27^0$34.6'N to $27^0$36.3' N latitude and $85^0$20.2'E to 85^o22.4'E longitude**.** The inhabitants of Badikhel VDC are Pahari, Neupane, Acharya and others. The Pahari is one of the indigenous nationalities among others.

The study area is located in Lalitpur district which lies in the middle of the district within the valley in the south corner, bounded by Godawari in the east, Jharuwarasi and Godawari in the north, Lele and Chapagaun in the south, Jharuwarasi and Chapagaun in the west. It is slightly steep and plain. The eastern part is covered with forest. Kodku and Karmanasa streams flow towards the north. It is reachable within 45 minutes by vehicle (Village profile report, 1998).

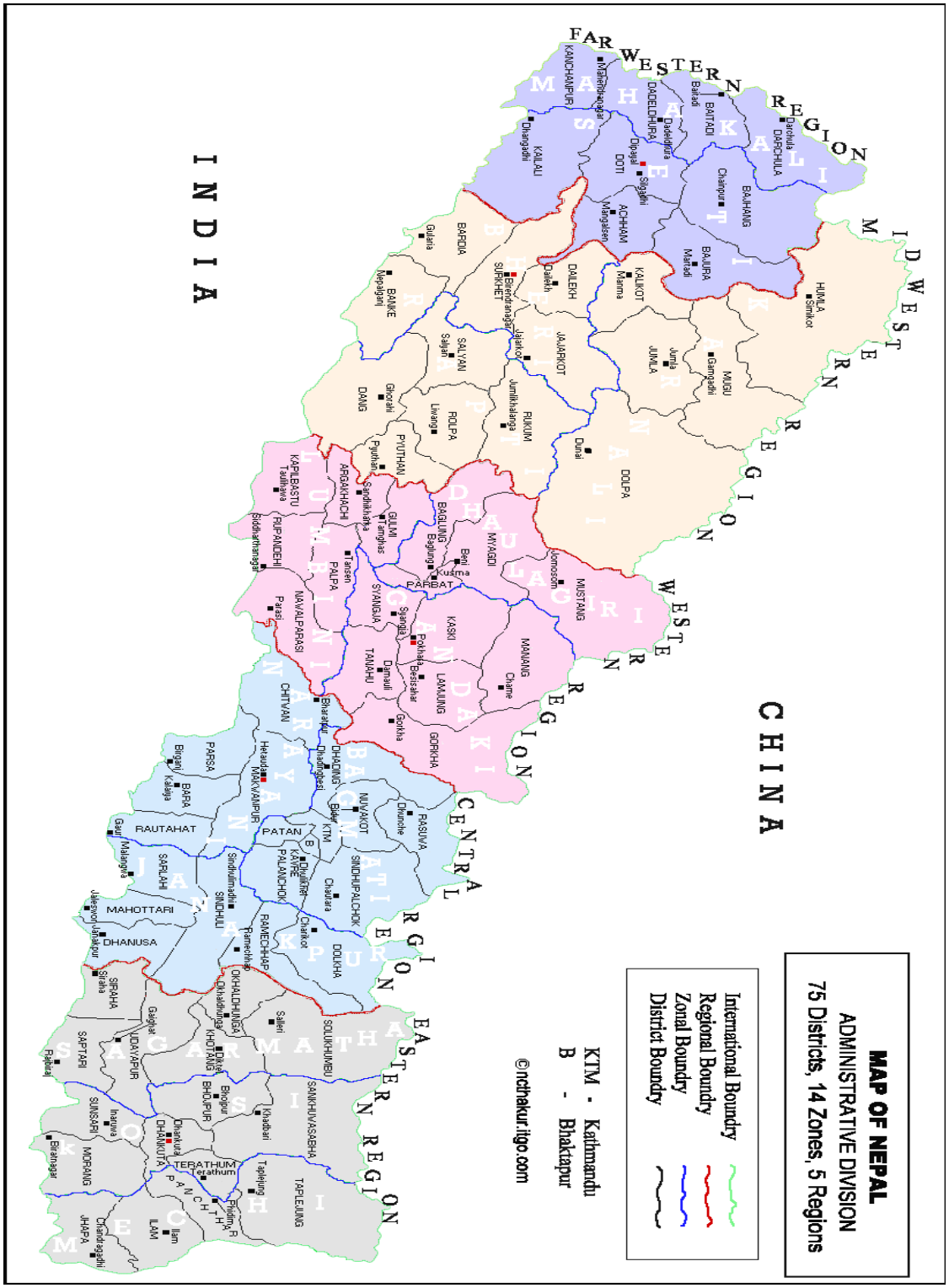
The total arable land is 6474.2 Ropanis (35% of total land) forest land 5247.6 Ropanis (44.04 %), non-productive land 90 Ropani (0.75 %), and pasture land (grazing land) 100 Ropani (0.83%). (Village profile report, 1998)

3.2 Ecology of the study area

The area to be studied is located about 12 km. south east of Lalitpur District Administration Office. The Badikhel VDC is among 41 VDCs with the area of 905.2 hectare (Village profile report of Badikhel by DDC Lalitpur, 1998) covered with low hills looking like mini valley. The topography is little sloppy and plane type with the altitude of 5000 ft. above sea level. The eastern part is covered with green forest. The Kodku and Karmanasa stream are situated as water source originated from this Badikhel VDC.

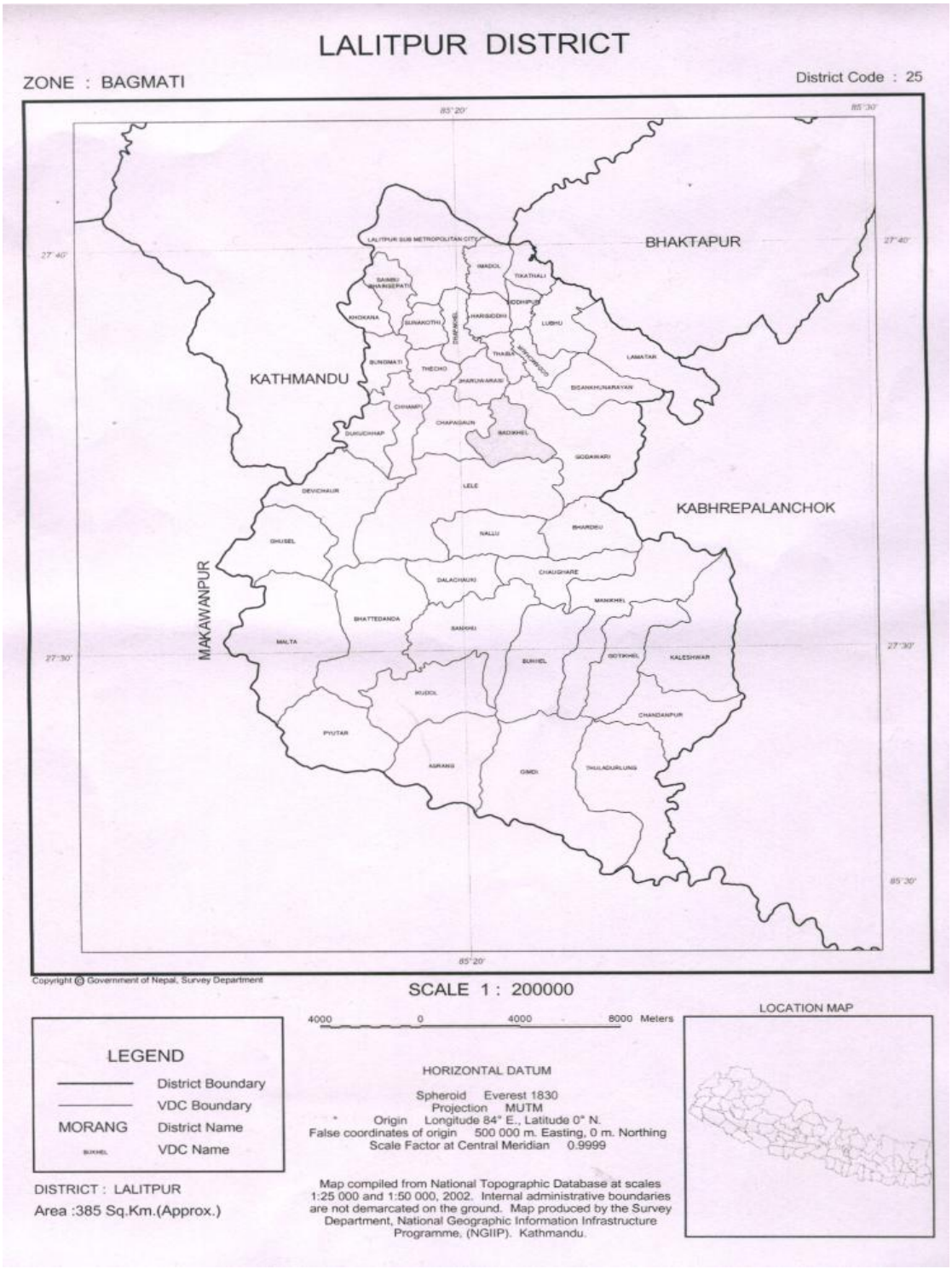
The climate of Badikhel VDC is subtropical, suitable for settlement due to forest area covering the VDC to make it pollution free and cause more rainfall in rainy season. The climate is mixed and it is also of temperate and subtropical. The land elevation is slightly sloppy and plane. The average temperature is 20.6^0C. Average rainfall is from 2000-2400 mm and relative humidity is from 60% to 80% (Department of Hydrology and Meteorology, 1999). The different types of vegetation is suited in the areas as the slopes are north and east facing with a smaller part facing west. The area is mostly covered with high hills and forest, so the vegetation is denser in the forest area. The most common species in the area is Pinus tree (*Pinus roxburgii*) in the high hills of south facing forest of Hashifora areas. Some common trees are Utis (*Alnus nepalensis*), Phirphire (*Acer oblongum*), Khari (*Cettris anstratis*), Musure

Katus (*Castronopsis tribuloids*), Kaulo (*Machilus odoratissima*), Ban paiyu (*Prunus cerasoides*), Phalanth (*Quercus glauca*), Kalikath (*Myrsine semiserrata*), Jhingane (*Eurya acuminate*), Kimbu (*Morus alba*), Lankhuri (*Praxinus florisbunda*), Koiralo (*Bauhinia variegate*), Siltimur (*Litse cubeba*), Chilaune (*Schima wallichi*), Dhalne Katus (C*astonopsis indica*), Bakaino (*Malia azedarach*), Lapsi (*Choeorospondias axillaries*), Okhar (*Juglans regia*), Bhalayo (*Rhus succedanea),* Gurans *(Rhododendron arborea),* Kafal *(Myrica nagi),* Nigalo *(Arundinaria falcate),* Chutro *(Berberis aristata),* Tejpat *(Cinnamomum tamala),* Rato Aiselu *(Dushenia indica),* Jure kafal *(Eribotrya dubia),* Dhasingare *(Gaultheria fragrantissima).* (Source: Spot field survey, 2008)

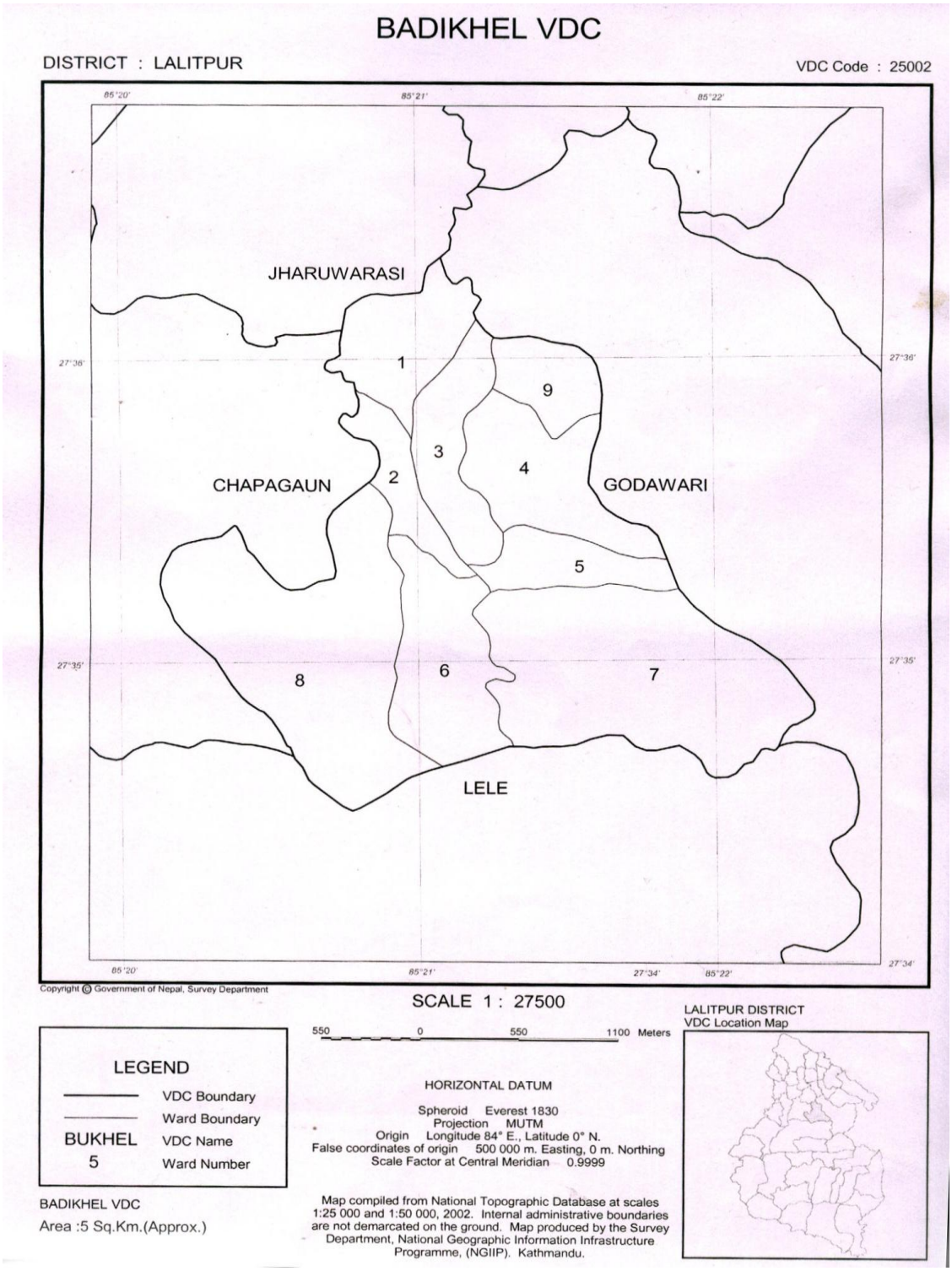


Map 1: Map of Nepal

Map 2: Map of Lalitpur district



Map 3: Map of Badikhel VDC



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CHAPTER IV

4. METHODOLOGY

4.1 Selection of Site

To make a detail research like this one needs to select the site and Badikhel VDC of Lalitpur where Pahari are in majority of population. The field visit for the research area to find the data and facts relevant to the study were made with various attempts. In total 7 fields visits were made during the study period (February 2007-April 2008). The study area being nearer to valley, visiting was easier and accessible within an hour.

4.2 Nature and Sources of Data:

The sources have been divided into two parts, primary and secondary.

4.2.1 Primary sources

Primary data are first hand and were collected by using following methods:

i. **Questionnaire:**
Very simple, lucid and precise questions were prepared (questionnaire is tabulated as an ANNEX of this study), so that respondent could easily answer that could meet the objective of the study.

ii. **Interview with Key informants:**
Key informants of the related subject, including local people like farmers, youth, elder people, knowledgeable and traditional healers like Dhamis, Jhankris, and other people were interviewed, and their information was noted, which is the valuable content of the research.

iii. **Field Visit and Observation**
Seven field visits were made in total during the study period (February 2007- April 2008). The first visit was made on February 18, 2007 on which plants sample were collected. The 2nd visit on February 25, 2007 was made to have interviews with different people of Pahari community along with the teachers of Good Neighbor (An educational institute operated by an NGO). The students of Pahari ethnicity are in majority in the Good Neighbor and other staff members of that area were involved in the oral interview. The 3rd field visit was made on March 7, 2007 on the day which animals' samples were collected.

On the 4th Visit that was made on April 16, 2007 photographs were taken and questionnaire was made. Medicinal plants were collected then in 5th visit made on 25th July, 2007. For the collection of medicinal plants next visit was made on 16th October 2007. Finally,

the last visit was made on 25th April, 2008, indigenous knowledge data was collected.

iv. Photography and sample collection

Samples of different known and unknown species of plants and animals which were available in the study area were collected. The collected samples were brought to Kathmandu and were identified with standard reference literature with the help of botanists and zoologists from the Central department of Botany and Zoology (T.U.) and the national Herbarium, Godawari, Kathmandu. The plant species are taxonomically classified into division, genera and species.

4.2.2 Secondary sources

Secondary data are very important for the comparison and justification of the primary data. They are collected from different sources like books, journals, theses, research and articles of different authors.

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CHAPTER V

5. RESULTS

5.1 Ethnography of the Pahari

"Anthropology is the descriptive study of human culture, as contrasted with ethnology, which is more concerned with theory. Even the descriptive data of research are necessarily organized according to some theoretical plan. The distinction between ethnography and ethnology is often questionable. In continental Europe the terms sometimes appear to be used interchangeably. In the Soviet Union ethnography is the general term for the study of living creatures. Among British and American social anthropologists, on the other hand, the theory is such an integral part of research that there is little need for the term ethnography" (Encyclopedia Americana, 1829, p.6632)

Similarly, the Encyclopedia Americana (1829) states ethnography as the descriptive study of a particular human society or the process of making such a study". Contemporary ethnography is based almost entirely on field work and requires the complete immersion of the anthropologist in the culture and everyday life of the people who are the subject of his study. There has been some confusion regarding the term ethnography and ethnology. Later, a term more widely used in Europe, encompasses the analytical and comparative study of cultures in general, which in American usage is known as the cultural anthropology and in British usage it is termed as social anthropology. The description of other ways of life is an actively with roots in ancient times. Herodotus, the Greek traveler and historian of the 5^{th} century B.C. wrote about 50 different people. He encountered or heard of, remarking on their laws, social customs, religions and appearance. European traders, missionaries and later colonial administrations rendered detailed accounts of non-European people in early 20^{th} century. Modern anthropologists like Polish born British anthropologist Bronislaw Malinowski in the Trobbriand Islands of Melanesia identified the establishment of ethnography as a professional field.

Contemporary ethnographies usually adhere to community rather than individual, focus and concentrate as the description of current circumstances rather than historical events. Ethnographers have taken full advantages of technological developments such as motion pictures, and tape recorders to augment their written accounts (p. 582).

According to The New Encyclopedia Britannica (1989), ethnobiology is a branch of anthropology that deals historically with the origin and affiliation of races and cultures anthropology specific; a branch of ethnology dealing with description of cultures rather than comparison and analysis (p.781).

Webster's third new International Dictionary (1966) emphasizes the ethnography as a significant part of ethnobiology. The ethnography of the Pahari, in this study is a research method intended to document and describes the ways of people's life and find out unknown facts and realities. This helps us to give real data on the basis of fieldwork by participatory observation. The study of ethnography of the Pahari tribe has given an insight and introspective analysis. The Pahari are found to be inhabited in the central-hilly region. The present research is focused on the Pahari of

Badikhel VDC. Data collected through ethnographic survey tools are analyzed and explained under different headings below.

Being a distinct nationality, the Pahari have their own identity in different socio-cultural background and separate lifestyle than other ethnic groups. The Pahari are dependent on cottage industry using raw materials from forests; they have close association with the bio-resources in a direct way. The bamboo and other plants are part and parcel of their survival base.

The indigenous knowledge regarding the traditional practices of resources use and management is less harmful and supportive towards conservation of natural bio-resources and implementation. Pahari's indigenous knowledge on the use of bio-resources and locally available plants and animals is negatively influenced by modernization on the one hand, and depletion of natural resources due to exploitation and overuse on the other hand has further affected them in continuing their traditional profession at the same pace.

The Pahari living in Badikhel VDC of Lalitpur district and in other parts of countries are minority indigenous groups of Nepal. A couple of socio-cultural researches on Pahari are carried out. They originally belong to Dailekh (Ukyab and Adhikari, 2057) and later settled in Lalitpur, Kavre, Makwanpur, Sindhupalchowk districts within the country and some population living in Darjeeling of India have also been reported (Gautam and Thapa Magar, 1994). Ward-wise distribution of Pahari in the study area is mentioned in table, below.

Pahari is a minor ethnic nationality among 59 indigenous nationalities of multicultural country, Nepal (CBS, 2001). This ethnic group is dispersed in the different areas of Nepal as Lalitpur, Makwanpur, Kavrepalanchowk, Sindhupalchowk, Gorkha, Kaski, Sindhuli, Udayapur, Okhaldhunga, Jhapa and Rautahat (CBS, 2001). They are backward in education; do have endangered socio-cultural practices and low economic status. As a result, they have low participation in development opportunities.

To address their problems and difficulties, Pahari Bikash Sangh was established in 1998 with specific aim to promote their activities and welfare of uneducated women and other backward families. According to the book "Caste and Keen in Nepal", India and Ceylon, Pahari look like Tamang people and according to Supreme historian Baburam Acharya Pahari are the ancestors of Kirants and Newars as mentioned in Newari language and Newari Culture (Malla, 1997).

Pahari were once ranked a high class of Newar in the beginning and later lowered because of hard working nature and cultural activities that vested and dominated groups disliked. Stone inscription in Taleju Bhairabnath of Bhaktapur are their exemplary works. They were displaced from Kathmandu to other hilly areas because of their low and unstable economic status (Malla, 1997).

5.1.1 Population of Pahari ethnic group in Nepal

According to the population census 2001 of Nepal, the total population of Pahari distributed across the country in 42 districts is 11,505. The distribution of population is found in all development regions. Among them female population is 5702 and male population is 5803. The Pahari population in Lalitpur district is distributed in 17 VDCs with total population of 3277. Among them 1688 is male population and 1589 is female population (table 1).

Table: 1 Wardwise population of Badikhel VDC

Wards	Population	Male	Female
1	9	4	5
2	61	30	31
3	28	13	15
4	290	142	148
5	342	168	174
6	200	98	102
7	534	262	272
8	170	84	86
9	4	2	2
Total	1638	803	835

(Source: Badikhel VDC database, 2001)

Table 2: Age-group wise Population distribution of Badikhel VDC, CBS, 2001

Age group	Percentage	Male	Female	Total
0-14	12%	96	100	196
5-14	14%	113	117	230
15-24	15%	120	125	245
25-34	16%	129	133	262
35-44	14%	112	117	229
45-54	13%	104	109	213
55-64	10%	81	84	165
65-above	6%	48	50	98
Total	100%	803	835	1638

(Source: CBS, 2001)

5.1.2 Physical appearance

The Paharis look strikingly like Tamangs. They are short, stocky, and robust with dark pigmented skin, but not all the members are equally deeply pigmented. The epicanthic eye fold is very common. Flat nose and broad brow ridges are pronounced, but to a lesser degree than other tribes of Mongoloid stock. They have straight black hair and the males have very scanty facial hair. Lips are thin and medium and aversion is not prominent as observed. They have brown to black eyes.

5.1.3 Language

As the origin basis of Pahari they have little similarity with Tamangs and Newars. The language of Pahari is categorized into Tibeto-Burman family (could be called offshoot) and no separate script has been found yet. The Pahari of the Badikhel residents are closer to Newars. They speak their language with the typical phrase which is a feature seen among the language of Tamang ethnic group and other hill tribe languages also. The language of Pahari is disappearing gradually due to assimilation among different ethnic groups and castes in the society causing modification in the language tradition and culture. The language is closer to Newari language in majority

whereas little similarity with Tamang pronunciation and other ethnic group of hill areas (Pokhrel, 1999/00). Different common words used by Pahari and their alternative words in Nepali and English are presented in table below.

Table 3: Common words or terms of Pahari language

Some common words or terms in Pahari Language			
S.N.	**Nepali terms**	**Pahari Terms**	**English Terms**
1	Logne	Kwan	Husband
2	Aayo	Layon	Came
3	Chhora	Puro	Son
4	Tapain	Chhithyan	You
5	Hami	Jari	We
6	Bhat	Ja	Rice
7	Roti	Mhanri	Chapati
8	Namaskar	Jopain	Greeting
9	Bhitra	Danhan	Inside
10	Khanu Bhayo	Nyana	Have you eaten ?
11	Anda	Khenja	Egg
12	Aago	Mi	Fire
13	Gayo	Wanngu	Went
14	Aama	Maan	Mother
15	Hajur	Chhithya	You
16	Timi	Chhari	You
17	Dhindo	Ganja	Porridge
18	Khola	Khura	Stream
19	Aaunu	Lyan	Come
20	Bahir	Pyanhan	Outside
21	Kukhura	Kha	Cock
22	Chhaina	Mura	No
23	Swasni	Mujon	Wife
24	Sutyo	Diuri	Slept
25	Baba	Ban	Father
26	Tan	Chhi	You
27	Pani	Lukho	Also
28	Naruno	Khaimire	Don’t cry
29	Ghar	Chhyen	House
30	Aaunohos	Lyanna	Please come
31	Chara	Jhunga	Bird
32	Phool	Sano	Flower
33	Chha	Du	Do

(Source: Pihi Vyaya Barkhari, 2002)

5.1.4 Education

The education is the agent for cultural reproduction as it helps to retain the heritage among the ethnic group that is passed on from ancestors. The indigenous knowledge for survival backed by education makes certain ethnic group best suited to the environment. The collection of experiences from different practices and incidents or happening makes people known about use and utility of different sources like plants and animals. The Pahari in comparison to other castes in Badikhel VDC are less educated and facing backwardness though they live nearer to urban area. There is one government and two private schools in this VDC. The number of household of Pahari is 365 and total population 1638 (female 835 and male 803 CBS, 2001).

Table 4: Some of the schools in Lalitpur district in which Pahari students attended

Good Neighbour International (NGO) running school		**Phulchowki Boarding School**		**Path Pradarshak School**		**Ceda school**	
Class	**Total Pahari students**	**Class**	**Total Pahari students**	**Class**	**Total Pahari students**	**Class**	**Total Pahari students**
Nursery	25	Nursery	6	Nursery	-	Nursery	-
LKG	43	LKG	-	LKG	-	LKG	-
UKG	23	UKG	9	UKG	22	UKG	-
1	27	1	6	1	25	1	-
2	23	2	-	2	38	2	-
3	13	3	4	3	37	3	-
4	14	4	3	4	43	4	2
5	-	5	2	5	40	5	-
6	-	6	3	6	37	6	1
7	-	7	4	7	32	7	2
8	-	8	2	8	-	8	-
9	-	9	6	9	-	9	1
10	-	10	-	10	-	10	1
Total	168		45		274		7
Grand Total	494	Total number of Pahari students in 4 schools is 494.					

(Source: Present Field Visit, 2008)

5.1.5 Housing

The housing system of Pahari people in Badikhel VDC Lalitpur is common as other houses in the locality. Houses are brick walled, two-roofed with recent replacements with concrete-roofed houses. The roof in the previous days were covered with bricks (*Jhingati*) and later replaced with zinc sheets. The joint family system was common in the past and even today also they have joint family except a few jobholders residing away from their locality in majority. The number of members varies from 4 to 7 per household, but on an average it is 5 individual. The access to transportation due to road facility and better economy in recent days is supporting for construction of modern concrete houses.

5.1.6 Religion and festivals

Being closer affinity to Newari culture, some celebrations and rituals are similar to that of Newars. Like Hindus, they also worship Ganesh, Goddesses and Bhairab as their ancestral God. The different celebrations of different periods are as follows:

a) Ghantakarna (Gathemangal) in Shrawan month (July/August).

b) Janaipurnima, Gaijatra in a separate way than others in Bhadra (August/ September).

c) Dashain is celebrated in a different way than other caste as they mainly celebrate Asthami, Nawami and Dashami in the month of Aswin/Kartik (October)

d) Tihar is not celebrated like the Newari culture Mhapooja (Self praying), but observed as Hindu tradition partially Kartik (October/ November)

e) The Mangsir month (November/December) Maruni formation with Bhailini is distinct culture of Pahari ethnicity. Besides, Machchhindra Nath (Red) is worshipped with jagaran (without sleep) overnight.

f) The cowhead is worshipped in the month of Poush (December/January) on the full moon day.

g) Shree Panchami (Worship of Goddess Saraswati or Goddess of education), Shwasthani poornima with Dewali Koolpooja (Ancestral Worship) is done. Sometimes the (ritual) is observed in the odd no. of year as a belief of the society during the month of Magh (January/ February)

h) The Kumari Pooja (Living Goddess) is celebrated in the month of Baisakh (April /May) in the Kathmandu valley whereas Bhimsen worship is observed in Kabhre district during Dashain festival.

i) The Chaitya Jatra is celebrated for 3 days with the establishment of lingo (a tall wooden stem) in the month of Chaitra (March/April).

Note: The social rituals and religious celebrations vary from place to place i.e. within valley and out of valley among the Pahari people.

5.1.7 Social association

According to different findings it is believed that Pahari are residents of hilly areas and nearer to the forests. They were dependent on agricultural activities and cottage industry like making different goods of bamboos, etc. They used to live in joint families. Women are given more priority though they were not involved in policy

making and leading role. Nowadays Pahari started to live in single family. They have a custom of the progeny from exogamous marriages, being assigned names from their mothers' lineage. The caste system or the level is distinct with different Pahari as Brahman and Kshetri Pahari.

The society of Pahari is guided by Dware who manage the different social settings as well as performances in religious and cultural celebrations. The declaration of data for different celebrations and performance is set on the will of Dware the chief of the Pahari as priest and hermit. The culture among Pahari is found influenced by other ethnic groups like Gurungs, as the chief of the society called Thakali who is also supposed to be the chief of the Pahari community. The chief of the Pahari community maintain law and order by giving justice through judgment of group of members associated to the "Thakali". The trustees (Guthis) are formed to manage different social activities in the communities. The various types of trustees are formed in the name of different Gods and Goddesses, such as Ganesh Guthi, Devi Guthi, Elamcha Guthi, Pata Guthi, Khey Guthi, Dhewa Guthi, Bhairab Guthi, etc. The society in the past time had been running with the instructions of witch doctors (Dhami, Jhankris). The chief of the society (Mhi-Thakali) or Je Thakali is honoured as priest or hermit. The messenger (Maahu) was used to be appointed by chief to convey the message to the people who claimed for justice due to quarrel or other crimes in the society. The chief while coming from the palace in ancient time used to come by riding horse and to honour and receive to the chief, people used to play different musical instruments. The maximum number of chief was four, and they used to be of different levels and designations according to age, experience and service period as eldest, middle, little, etc. The Pahari society people are distributed in seven villages though the justice is awarded in all the villages from the center i.e. Badikhel or Kodku. Different groups and castes of Pahari are as under.

1. **Brahmin group Pahari**

a) Pokhrel Pahari b) Jaisi Pahari

2. **Chhetri group Pahari**

a) Thakuri Pahari b) Chhetri Pahari

3. **Newar group Pahari**

a) Pihi Pahari b) Nagarkoti Pahari

4. **Tamang group Pahari**

a) Pakhang Pahari (Bhote Pahari)

5. **Majhi group Pahari**

a) Khole Pahari

The distinct 'Gotra' is not categorized, but they have different Gotra and they are: 1). Atri 2) Archanan 3) Ishwashya 4) Sukla yajurved 5) Madhyandini Shakha and 6) Kashyap etc.

People those offering female ducks in their religious celebrations belong to matriarchal society belonging to Kashyap Gotra; whereas people those having the system of offering male ducks believe in patriarchal society belonging to Atri Gotra (Malla, 1997).

5.1.8 Rituals- (Life cycle rites)

a) **Birth ritual or Nwaran (naming ceremony):** It is performed on the 3rd day after birth for females and 4th day after birth for males. Women during pregnancy do not perform any worship and husband too does not participate in Pashu Bali (offering of animals) as believed among Pahari. The milk and urine of cow is spread around the home for purification. Before worshipping a bath for mother and baby is given and worshipping is performed at a scrubbed area with clay and dung. Then after the grandmother of paternal or maternal home worships Suryadev (Sun God) and accept the baby as a new generation putting Tika (wet vermillion with rice grains) on the forehead. At the end guests are entertained with feast.

b) **Pasni (The ceremony of feeding baby with cereals for the first time called Janku in Pahari language):** The proper day is declared by the hermit in the odd number of month i.e. 5 or 7 then the new clothes with feeding performance is observed. The baby is dressed up in new clothes. The grandmother from maternal or paternal's house worship at a place scrubbed with clay and dung and place a pen an exercise book there. Then Tika (wet vermillion with rice grains) is put on the forehead and then baby is allowed to touch any of exercise books, pens, red soil and cow dung. If the baby touches exercise book, it is believed that s/he will be an educated person, if s/he touches soil s/he will become a farmer, if cow-dung then s/he will get involved in animal husbandry in the future-believed traditionally.

c) **Bratabandh (Manhood Ritual):** The Bratabandh is observed during Koolpooja (ancestral worship) without declaring any day by hermit in the odd number days i.e. 1, 3, 5, 7, etc., during Koolpooja (Worship of ancestral God) and Swasthani Purnima (spring full moon day). During the ritual performance the maternal uncle or paternal aunt (father's sister) has to bring a packet of gift (foods and clothes), pots, and beaten rice along with 13 varieties for the ritual performance. While entrance of Phupu (Paternal aunt) carrying gift items should not be taken in the absence of maternal uncle's gift. The food items brought by them are distributed among guests. The maternal uncle puts Tika (wet vermilion with rice grains) on the forehead and makes him wear langoti (Bodice). The family of maternal uncle and paternal aunt are fed in the home. While seeing them off the music band is organized with offering of a male goat or female goat and served to them. The rituals vary from place to place.

d) **Marriage:** Pahari commonly follow an arranged marriage system. Love marriage is rare; and Chori–bibaha (eloped marriage) is also quite common among the Pahari. For arranged marriage the proposal is made from the boy side and if proposal is accepted then egg, Raksi (crude alcohol) and nut is carried and offered to the girl with an introduction to each other. Then the engagement is declared for marriage with organization of a feast. The marriage celebration is observed on the day of declaration date made by (Brahmin) hermit. During the marriage performance the water is tasted from the legs of the bridegroom and bride by their close relatives, which is similar to Hindu (Aryan) culture. In the marriage ritual Hindu influence is dominantly observed.

e) **Death rituals:** On the death among Pahari, the corpse is taken and given the last rites by the son or member of guthi (socio-cultural group). The females and people from other castes are not allowed to touch the corpse. Water is sprinkled by Pahari woman on the corpse. Prior to corpse being taken away, three stones are placed on 'velsi' and the fire is lit in the area between these stones. An earthen ware pot is placed on this fire and paddy is roasted in it. When the corpse is taken away, these stones are also tied together with thread and carried along. At the site of cremation, the corpse is

offered water and dakshina and then the 'dagbatti' (last fire on dead body) is lit on its mouth and the pyre fired by the kriyaputri (son of the deceased). The corpse is seen to be placed on its back on the pyre as in the case with most cremation practices. The cremation site is usually near their settlement area or on the tops of nearby hills.

When the cremation is over and done with, the funeral goers use a grass called 'smagatho' or Dhupi (pine needles) to rub their hands and apply to their mouths after which they take bath. These funeral goers make a barrier of thorns (raspberry bushes) and step over this while they return. The purification is done on an odd day (i.e. 7, 9, 11, and 13). Up to the purification the Guthiare (trustee holders) gets affected with impurity. After the trustee holders purify the kriyaputri (Funeral rite performers) who remain impure up to 13th day. On the 13th day the trustee holders are allowed to wear white clothes after purification by Guvaju (Pahari Brahmin). The Pitribhoj (paternal feast) for the relatives is organized on the day of purification. The death ritual is followed up to 45 days, 6 months and ends in one year by the enchanting performance of Guvaju (Brahmin). The Shraddha (annual death anniversary) is observed and followed in the presence of Guvaju (Brahmin). The death rituals are performed differently in different parts of the country among the Pahari.

5.1.9 Indigenous knowledge

The indigenous people are those whose ancestors were the original inhabitants of their lands and include hunters, shifting cultivators, fisherman, nomads, pastorals and settled farmers who have little participation in market economy (Singh, 1995). Indigenous knowledge is based on the local people's culture, beliefs, systems and practices. Rural people, though uneducated, possess an invaluable knowledge practices developed by the local people for centuries. They are for their subsistence livelihoods practiced sine antiquity and are their culture, which we call collectively as indigenous knowledge system.

The Pahari of Badikhel VDC of Lalitpur district, are settled near the forest area and dependent on the forest resources mostly in comparison to other castes around. The Pahari are well equipped with the traditional skills and practices to use the resources differently. The knowledge has been evolved and passed on from generation to generation for maintaining culture and tradition. The knowledge and practice of traditional use of herbs as medicine for different ailments has been vanishing gradually due to modern facilities in medicine and health services by the influence of urbanization. Many traditional practices in different ailments are replaced with modern scientific practices and modern medical advancements. The knowledge of using flora and fauna related to the medicinal and other uses has been found moderate in the society, mainly among the people of old generation. The knowledge or techniques to render the non-edible plants palatable and these have ensured their difficult times. They still rely on the wild plants and animals, but to a small extent. They still have ideas about the utilization of plants in different forms. The industrial (cottage craft) utility of bamboo and other plants in the traditional way is important even in the days to come. The traditional belief in witchcraft though prevalent in the societies makes them to follow the traditional way of treatment and cure of severe physical ailments and diseases.

5.1.10 Economy

The Pahari's economic status is on an average. Following the modern clothing, housing and job opportunities, though to a small extent, they are moderately improving their economic status. The cottage industry is mainly focused on the bamboo product like Dali (basket), Nanglo (winnowing fan) etc. Though they are found laborious, they are involved in work with low wages and income, work on daily-wage activities. Agriculture profession is the main source of survival and livelihood in Badikhel VDC. The knowledge of agriculture is quite traditional in that area among Pahari population. Recently modern farming techniques have been in a practice among them. The animal husbandry along the agronomy and horticulture is common. The common local flowering (ornamental) plants of Badikhel VDC are source of income.

The rearing of poultry also supports them towards maintaining families. The indigenous knowledge, if implemented on medicinal use of herbal and faunal access to a larger extent, it could be useful to enhance the economic status of Pahari in Badikhel VDC. It is supposed that the Khusman Pahari, 100 years ago was taught (trained) to become skilled man to prepare the article of bamboo.

5.2 Ethnobiology of Pahari ethnic group

According to the ancestral history of Pahari, they started inhabiting in rural hilly areas near to forests and forest environment. They utilize a wide variety of plant and animal species. The forest resource mainly the product of cottage industry beside forest, river and land is also necessary for them. The management of environment is done by the local committee of consumer and resources are maintained to fulfill the needs for basic survival. From such practices and perceptions, they have constructed a system of the use and maintenance of natural resources as a means of referral to the indigenous knowledge system. The study of ethnobiology of the Pahari facilitates the documentation of indigenous knowledge about the utilization of biological resources. Ethnobiology further divided into two branches: ethnozoolgy and ethnobotany. The ethnobiological information obtained from the present study is described under these two headings. It has been found that the Pahari use species of animals and plants for various purposes (table 33 and 35).

In essence, biodiversity is an integral part of human environment, despite variations in socio-geographical settings and distribution of resources, which perpetuate form the culture, for example the ways how people use and the species they use greatly. It is clear that any useful answer depends in the cultural systems. In comparison to developed and urban areas, people in rural areas with subsistence farming use the plant and animal species in their own ways and to the extreme they can consume. This, in a long run, affects the biodiversity of the area. Thus it ought to be assessed under what conditions does an individual or a society affect biological diversity? Ethnobiological study does not conventionally deal with the conservation of biological resources, but is a convergence between them and their linkages are compelled by demographic and environmental changes. Though population has increased, many cultures and language groups have shrunk as outer forces with greater economic flexibility exploit those natural resources. Therefore, a holistic field such as ethnobiological study should be a source to confront development-conservation polarity by understanding the effects of social and economic changes on biological diversity. Documentation of flora and fauna and the ways how/what they are used for are separately analyzed and presented under two different headings: ethnobotany and

ethnozoology respectively. In addition, following a recent trend and development in ethnobiological study, flora and fauna especially used for medicinal purposes are categorized and explained under medico-ethnobiology.

5.2.1 Ethnozoology

Animals are important source of livelihood to human beings and contribute in everyday life for different purpose from earlier time. The Pahari also use animals for different utility. The ethnozoology of Pahari reveals that 38 species of animals (vertebrates and invertebrates) are found to be useful among them. The vertebrates include mammals, birds and fish where as nine invertebrate species include mollusks, insects, crustacean, arachnids and oligochaetes.

Table 5: Categorization of animal species used by the Pahari

S/N	Types Of Animals	Order	Family	Genus	Species	State	
						Wild	Domesticated
1	Vertebrates	11	14	23	29	22	7
2	Mammals	5	6	11	14	9	5
3	Aves	5	6	10	12	10	2
4	Fishes	1	1	1	3	3	0
	Invertebrates	5	7	8	9	9	0
5	Mollusks	1	1	1	1	1	0
6	Insects	1	4	5	5	5	0
7	Crustaceans	1	1	1	1	1	0
8	Arachnid	1	1	1	1	1	0
9	Oligochaetes	1	1	1	1	1	0
	Total	16	21	31	38	31	7

The vertebrates belongs to 11 orders, 14 families, 23 genera, and 29 species where as the invertebrates belong to 5 orders, 7 families 8 genera and 9 species (table 5). Thus, the total faunal resources of ethnozoological significance to the Pahari encompass 18 orders, 23 families, 31 genera and 38 species (table 5); out of these 38 species, 31 species are wild animals and remaining 7 species are domesticated ones.

Table 6: Ethno-zoological glance of Pahari

S/N	Type/ Use	Orders	Families	Genera	Species	Status	
						Wild	Domesticated
1	Food (Meat)	8	11	18	26	22	4
2	Medicinal	6	7	8	8	8	0
3	Ceremonial	1	1	1	1	0	1
4	Pet	2	3	3	3	0	3
5	Agricultural	1	1	1	1	0	1
	Total	18	23	31	39	30	9

Note: The animal, cow (*Bos indicus*) is used for both agricultural and ceremonial purpose.

5.2.1.1 Mammals

Mammalian fauna used by Pahari are of 5 orders, 6 families, 11 genera, and 14 species. Out of these species 5 are domesticated and rest 9 species are wild. The fauna includes artiodactyls, carnivores, chiroptera and a logomorph. (Table 32)

Pahari basically survived on the forest products in the past but presently lack hunting expertise. The wild animals are rarely available though they were used for medical purpose in the past. The domesticated animals are used for agricultural purpose and as the source of meat and manure. Total 7 species are used as source of meat, 5 with medicinal value, and 2 as a pet and 1 as agricultural as well as ritual value.

5.2.1.2 Aves

Pahari are associated with variety of avian fauna belonging to 5 orders and 6 families, 10 genera and 12 species. Out of these 2 species are domesticated rest 10 species are wild. Few birds are used for meat with sacrifice during celebrations to the Gods, Goddesses and deities. Few birds are used as pet animal at home. (Table 30)

5.2.1.3 Pisces

Fishing is not common in the recent years. Though in the past they used to practice fishing in a partial manner. The Kodku and Karmanasa rivers were covered with fishes earlier but not today. The fishing technique is absent among Pahari ethnic group. There are 1 order and 1 family, 1 genus and 3 species. All 3 species are wild. (Table 31)

5.2.1.4 Invertebrates

The invertebrates' animals of ethnozoological importance to the Pahari include Mollusk, insects, crustaceans, and annelids belonging to 5 orders, 7 families, 8 genera and 9 species. (Table 29)

A species of mollusks (bob/ *anadenus sp.*), arachnid (Makura/ *Aranae sp.*) and oligochaete (Gadyaula/ *Pheretima sp.*) have medicinal significance. The insects used by Pahari belong to 1 order, 4 families 4 genera and 5 species. Out of these 2 species are consumed as food. The honeybee (*Apis cerana*) and wild honeybee (*Apis dorsata),* the products are only used. Similarly the crustaceans belong to 1 order, 1 family 1 genera and 1 species.

5.2.2 Ethnobotany

It is the study of plants in relation to the needs and customs of given ethnic group of people (Britannica World Language Dictionary, 1995).

S. N.	Type of Plants	Family	Genus	Species	State	
					Wild	Cultivated
1	Mushrooms	1	2	3	3	0
2	Pteridophytes	2	3	6	6	0
3	Gymnosperms	2	4	4	4	0
4	Monocots	17	49	57	35	22
5	Dicots	64	144	214	132	82
	Total	86	202	284	180	104

Table 7: Classification of the Plant species used by the Pahari

The Pahari use 284 plant species for different uses. Out of these, 180 species are obtained from the local forest and 104 species are cultivated. These plant species include 9 cryptogams and remaining 275 species of phanerogams. Cryptogams include mushroom which belong to 1 family, 2 genera and 3 species, and Pteridophytes belong to 2 families, 3 genera and 6 species. Phanerogams include 4 species gymnosperm and angiosperm is divided into 57 monocot species and 214 dicot species. Gymnosperm of ethnobiological importance to the Paharis belongs to 2 families, 4 genera and 4 species, monocot belongs to 17 families, 49 genera and 57 species and dicots belong to 64 families, 144 genera and 214 species. (Table 34)

These plants are variously used by Pahari people. The utility is categorized into i) Food uses and ii) non-food uses.

5.2.2.1 Food uses

Table 8: Ethno-botanical glance at the Pahari uses

S. N.	Types of Use	Family	Genus	Species	States	
					Wild	Cultivated
A)	**Food Uses**					
1	Vegetables	24	42	60	26	34
2	Cereals	2	7	8	0	8
3	Pulses	1	10	14	0	14
4	Fruits	27	32	41	20	21
5	Roots and Tubers	2	2	8	7	1
6	Spices	11	16	17	1	16
7	Oil	1	1	2	0	2
8	Pickle	2	2	2	1	1

B)	**Non-Food Uses**					
1	Timber and Wood	17	23	24	24	0
2	Bedding	2	2	2	2	0
3	Fodder	21	32	42	42	0
4	Thatching	2	4	4	4	0
5	Ceremonial	16	18	18	11	7
6	Broom	2	2	2	2	0
7	Fibre	4	4	5	3	2
8	Fish Poison /Poison	3	3	3	3	0
9	Intoxicant	2	2	2	2	0
10	Drink	3	3	3	1	2
11	Medicine	61	73	80	70	10
12	Bio-fencing	6	9	9	9	0
13	Fuel	3	4	4	4	0
14	Thread	1	1	1	1	0
15	Smoke	1	1	1	0	1
	Total	214	293	352	233	119

Note: Some species of plants have more than one utility.

Vegetables: The 60 plant species belonging to 24 families and 42 genera are used by the Pahari for vegetables. Out of these, 26 species are wild and 34 are cultivated. They use leaves, stems, flower, fruits, roots, pods, shoots, fronds, or thalli as vegetables. They use 3 species of wild mushroom rarely.

Table 9: The cultivated plants used by Pahari as vegetables

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Araceae	*Alocasia antiquorum var. esculenta*	Cocoyam	Karkalo	Fagun	C	Veg.	Shoot/ Stem
2	Araceae	*Alocasia endicum Schott*	Alocasia	Pindalu	Fagun	C	Veg.	Stem
3	Chenopodiaceae	*Spinacea oleracea L.*	Spinach	Palungo	Polocha	C	Veg.	Leaves
4	Cruciferae	*Brassica campestris L.*	Indian rapa	Tori	Tu	C	Veg.	Leaves/Seed
5	Cruciferae	*Brassica juncea L.*	Leaf mustard	Rayo	Pachhai	C	Veg.	Leaves
6	Cruciferae	*Brassica oleracea var. Batsytis L.*	Cauliflower	Cauli	Cauli	C	Veg.	Flower
7	Cruciferae	*Brassica oleracea var. capitata*	Cabbage	Banda	Banda Govi	C	Veg.	Leaves
8	Cruciferae	*Brassica rapa Linn*	Turnip	Salgam	Shalgam	C	Veg.	Root
9	Cruciferae	*Lepidium sp.*	Garden cress	Chamsur	Chamsur	C	Veg.	Shoot
10	Cruciferae	*Persea sps.*	Cauliflower	Kauli	Kauli	C	Veg.	Flower
11	Cruciferae	*Raphanus sativus L.*	Radish	Mula	Kho	C	Veg.	Root
12	Cucurbitaceae	*Benincasa hispida Cogn.*	Ash gourd	Kuvindo	Kuvindo	C	Veg.	Fruit
13	Cucurbitaceae	*Cucurbita pepo L.*	Marrow gourd / Pumpkin	Pharsi	Phachhi	C	Veg.	Fruit
14	Cucurbitaceae	*Leganaria siceraria Standl.*	Bottle gourd	Lauka	Lauka	C	Veg.	Fruit
15	Cucurbitaceae	*Luffa acutangula Roxb.*	Ribbed gourd	Pate ghiraula	Pate Toria	C	Veg.	Fruit
16	Cucurbitaceae	*Luffa cylindrical Roem.*	Sponge gourd	Ghiraula	Toria	C	Veg.	Fruit

17	Cucurbitaceae	*Mamordica balsamina*	Balsam apple	Barela	Kokocha	C	Veg.	Fruit
18	Cucurbitaceae	*Mamordica charantia L.*	Bitter gourd	Tite Karela	Khakhra Kokocha	C	Veg.	Fruit
19	Cucurbitaceae	*Sechium edule (Jacq.) SW.*	Chayote	Iskoos	Iskoos	C	Veg.	Fruit
20	Cucurbitaceae	*Trichosanthes anguina L.*	Snake gourd	Chichinda	Chichinda	C	Veg.	Fruit
21	Cucurbitaceae	*Trichosanthes dioica Roxb.*	Pointed gourd	Parbal	Dharke Toria	C	Veg.	Fruit
22	Discoreaceae	*Discorea bulbifera*	Air potato/ Potato Yam	Githa	Githa	C	Veg.	Fruit
23	Leguminosae	*Dolichos lablab L.*	Lablab	Simi	Simi	C	Veg.	Pod / seed
24	Leguminosae	*Pisum arvanse L.*	Field pea	Sano kerau	Kuraoo	C	Veg.	Pod / Seed
25	Leguminosae	*Pisum sativum L.*	Garden pea	Thulo kerao	Dhaukuraoo	C	Veg.	Pod / Seed
26	Leguminosae	*Vicia faba L.*	Horse beari	Bakulla	Bakula	C	Veg.	Pod / Seed
27	Leguminosae	*Vigna sinensis Sari.*	Cow pea	Bodi	Bhudi	C	Veg.	Pod / Seed
28	Malvaceae	*Hibiscus esculentus L.*	Lady’s finger	Ramtori	Bhindi	C	Veg.	Fruit
29	Solanaceae	*Capsicum frutescens L.*	Bell peeper	Bhende khursani	Bhenden Khoshni	C	Veg.	Fruit
30	Solanaceae	*Lycopersicum esculentum Mill.*	Tomato	Golbhenda	Kobhra	C	Veg.	Fruit
31	Solanaceae	*Solanum melongena L.*	Egg plant/Brinjal	Bhanta	Bhanta	C	Veg.	Fruit
32	Solanaceae	*Solanum tuberosum L.*	Potato	Aaloo	Aaloo	C	Veg.	Fruit
33	Umbelliferae	*Anethum graveolens L.*	Dill	Shonp	Shonp	C	Veg.	Shoot/Fruit
34	Umbelliferae	*Daucus carota L.*	Carrot	Ganjar	Ganjar	C	Veg.	Root

Table 10: Wild plants used by Pahari as vegetables

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Agaricaceae	*Agaricus biporus*	Edible Mushroom	Gobre Chyau	Parkhi Mhi	W	Veg.	Thallus
2	Agaricaceae	*Amantia sp.*		Sal Chyau	Sal Mhi	W	Veg.	Thallus
3	Agaricaceae	*Amantia sp.*		Salle chyau	Sirau Mhi	W	Veg.	Thallus
4	Amaranthaceae	*Amaranthus virdis*	Amaranth	Latte	Bagun	W	Veg.	Shoot
5	Amaranthaceae	*Amaranthus caudatus L.*	Spiny pigweed	Seto lunde	Bagun	W	Veg.	Shoot
6	Amaranthaceae	*Amaranthus spinosus L.*	Spiny pigweed	Rato lunde	Sirau bagun	W	Veg.	Shoot
7	Araceae	*Colocasia fallax Schott*	Wild cocoyam	Jangali Karkalo	Ban Fagun	W	Veg.	Shoot / Stem
8	Aspidiaceae	*Dryoathyrium boryanum Willd.*	Wild fern	Kalo niuro	Wanra	W	Veg.	Shoot
9	Aspidiaceae	*Diplazium esculentum*		Pani Niuro		W	Veg.	Leaves
10	Cruciferae	*Nasturium officinalis R. Br.*	Water cress	Khole saag	Khole Saag	W	Veg.	Shoot
11	Discoreaceae	*Discorea bulbifera L.*	Potato Yam / Air potato	Ban Tarul	Tarul	W	Veg.	Fruit
12	Graminae	*Bambusa tudla Roxb.*	Bamboo	Tama bans	Pura	W	Veg.	Shoot
13	Graminae	*Bambusa vulgaris Schrad.*	Feathery bamboo	Tama bans	Pura	W	Veg.	Shoot
14	Leguminosae	*Bauhinea variegate L.*	Mountain ebony	Koiralo	Koiralo	W	Veg.	Flower
15	Leguminosae	*Bauhinea purpurea L.*	Pink bauhinia	Tanki	Tanki	W	Veg.	Flower/ Leaves

16	Leguminosae	*Mucuna pruriens*	Cowhage	Kaunse Simi	Kaunse Simi	W	Veg.	Pod
17	Liliaceae	*Asparagus recemosus Willd.*	Wild asparagus	Kurilo	Kurilo	W	Veg.	Root/ shoot
18	Moraceae	*Ficus lacor Buch.-Ham.*		Kabro	Kabro	W	Veg.	Leaves /Flower
19	Ophioglossaceae	*Ophioglossum nudicaula L.*		Zibre saag		W	Veg.	Frond
20	Ophioglossaceae	*Ophioglossum petiolatum L.*		Zibre saag		W	Veg.	Leaves
21	Ophioglossaceae	*Ophioglossum reticulatum Hook.*		Zibre saag		W	Veg.	Leaves
22	Orchidaceae	*Rhynchosystylis relusa*	Orchid	Ghoghegava		W	Veg.	Shoot
23	Ploypodiaceae	*Dryioptris filix*	Fern	Uniu	Uniu	W	Veg.	Shoot
24	Smileaceae	*Smilax aspara L.*	Green briers	Kukur daino	Kukur daino	W	Veg.	Shoot/ root
25	Urticaceae	*Utrica ardens L.*	Stinging nettle	Sisnu	Nhaangi	W	Veg.	Leaves
26	Urticaceae	*Utrica dioica L.*	Stinging nettle	Sisnu	Nhaangi	W	Veg.	Leaves

Cereals and Pulses: The Pahari use 14 species of pulses belonging to 1 family and 10 genera. Out of which all are cultivated and 8 species of cereals belonging to 2 family and 7 genera. Almost all species are cultivated. The use of these kinds of cultivated products indicates that Pahari people are agricultural food gathering people with socialized manner.

Table 11: Cereals used by Pahari

S.N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Graminae	*Eleusine coracana (L.) Gaertn*	Finger millet	Kodo	Dhusen	C	Cereal	Grain
2	Graminae	*Pennisetum typhoides*	Pearl Millet	Bajra	Bajra	C	Cereal	Grain
3	Graminae	*Triticum sativum L.*	Wheat	Gahu	Chuwa	C	Cereal	Grain
4	Graminae	*Sorghum vulgare Pers.*	Great millet	Junelo	Junelo	C	Cereal	Grain
5	Graminae	*Oryza sativa L.*	Rice	Dhan	Ya	C	Cereal	Grain
6	Graminae	*Zea mays L.*	Maize	Makai		C	Cereal	Grain
7	Polygonaceae	*Fagopyrum esculentum*	Sweet buck wheat	Mithe phapar	Phapar	C	Cereal	Grain
8	Polygonaceae	*Fagopyrum tataricum Geartn.*	Tatary buck wheat	Tite Phapar	Phapar	C	Cereal	Grain

Table 12: Pulses used by Pahari

S.N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Leguminosae	*Cajanus Cajun L.*	Pigeon pea	Rahar	Rahar	C	Pulse	Seed
2	Leguminosae	*Cicer arietinum L.*	Gram	Chana	Chana	C	Pulse	Seed
3	Leguminosae	*Dolichos biflorus*	Horse gram	Gahat	Koti	C	Pulse	Seed
4	Leguminosae	*Dolichos lablab L.*	Lablab	Simi	Simi	C	Pulse	Pod/ Seed
5	Leguminosae	*Glycine max L.*	Soyabean	Bhatmas	Maree	C	Pulse	Seed
6	Leguminosae	*Lathyrus sativus L.*	Grass pea	Khesari	Khesari	C	Pulse	Seed
7	Leguminosae	*Lens esculenta Moehch.*	Lentil	Masoor	Musu	C	Pulse	Seed
8	Leguminosae	*Phaseolus aureus Roxb.*	Green gram	Mugi	Mugi	C	Pulse	Seed
9	Leguminosae	*Phaseolus calcaralus Roxb.*	Red bean	Masyang	Masyang	C	Pulse	Seed
10	Leguminosae	*Phaseolus mungo L.*	Black gram	Maas	Maasi	C	Pulse	Seed
11	Leguminosae	*Pisum arvanse L.*	Field pea	Sano kerau	Kuraoo	C	Pulse	Pod/ Seed
12	Leguminosae	*Pisum sativum L.*	Garden pea	Thulo kerao	Dhaukuraoo	C	Pulse	Pod/ Seed
13	Leguminosae	*Vicia faba L.*	Horse beari	Bakulla	Bakula	C	Pulse	Pod/ Seed
14	Leguminosae	*Vigna sinensis Sari.*	Cow pea	Bodi	Bhudi	C	Pulse	Pod/ Seed

Fruits: The Pahari use 41 plant species belonging to 27 families and 32 genera for fruits. Of these 20 species are wild and rest 21 are cultivated species. These include nuts as well as other fleshy fruits.

Table 13: Cultivated fruits used by Pahari

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Anacardiaceae	*Magnifera indica L.*	Mango	Aamp	Aamp	C	Fruit	Fruit
2	Caricaceae	*Carica papaya L.*	Papaya	Mewa	Mewa	C	Fruit	Fruit
3	Convulvulaceae	*Ipomoea batata (L.) Poir.*	Sweet potato	Shakharkhanda	Hee	C	Fruit	Tuber
4	Cucurbitaceae	*Cucumis sativus L.*	Field Cucumber	Kakro	Tushi	C	Fruit	Fruit
5	Ebenaceae	*Diospyros Virginia*	Persimon	Haluwabed	Haluwabed	C	Fruit	Fruit
6	Juglandaceae	*Juglans regia*	Walnut	Okhar	Okhar	C	Fruit	Seed/ Bark
7	Leguminosae	*Arachis hypogea L.*	Ground nut	Badam	Badam	C	Fruit	Seed
8	Musaceae	*Musa paradisica l.*	Banana	Maisai	Mojin	C	Fruit	Fruit
9	Myrtaceae	*Psidium juajava Linn.*	Guava	Amba	Aamsi	C	Fruit	Fruit
10	Punicaceae	*Punica gromatum L.*	Pomegranate	Anar	Dhachipan	C	Fruit	Fruit
11	Rosaceae	*Prunus Domestica*	Peach	Aalubokhra		C	Fruit	Fruit
12	Rosaceae	*Prunus domestica L. var. instiata*	Plum	Aalubokhara	Aalcha	C	Fruit	Fruit
13	Rosaceae	*Prunus persica Stokes.*	Peach	Aaru	Besi	C	Fruit	Fruit
14	Rosaceae	*Pyrus communis L.*	Common pear	Naspati	Pasi	C	Fruit	Fruit
15	Rutaceae	*Citrus aurantifolia Swing.*	Lime	Kagati	Kagati	C	Fruit	Fruit
16	Rutaceae	*Citrus jambhire L.*	Rough lemon	Jyamir	Jhwampa	C	Fruit	Fruit
17	Rutaceae	*Citrus limon Burm.*	Lemon	Nibuwa	Lhimshi	C	Fruit	Fruit
18	Rutaceae	*Citrus maxima L.*	Pummelo	Bhogate	Bhogate	C	Fruit	Fruit
19	Rutaceae	*Citrus medica L.*	Citron	Bimiro	Tushipon	C	Fruit	Fruit
20	Sapindaceae	*Nephelium litchi camp.*		Litchi	Litchi	C	Fruit	Fruit
21	Vitaceae	*Vitis vinifera L.*	Grapes	Angoor	Angoor	C	Fruit	Fruit

Table 14: Wild fruits consumed by Pahari

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Anacardiaceae	*Choeros communis axillaris*	Nepalese hog plum	Lapsi	Gopama	W	Fruit	Fruit
2	Barberidaceae	*Mohania nepalensis*		Jamane mandro	Chutro	W	Fruit	Bark/ Med.
3	Ericaceae	*Lyonia ovalifolia*	Lyonia	Angeri		W	Fruit	Fruit
4	Euphorbiaceae	*Phyllanthus emblica L.*	Emblic myrobalan	Amala	Amala	W	Fruit	Fruit
5	Euphorbiaceae	*Ricinus communis L.*	Castor plant	Ander	Ander	W	Fruit	Fruit
6	Fagaceae	*Castanopsis indica (Roxb.) A. DC*	Indian chesnut	Dhalne katus	Bhulsima	W	Fruit	Fruit
7	Moraceae	*Ficus semicordata Buch.-Ham.*	Nepal Fodd. Fig	Khanayo	Khanayo	W	Fruit	Fruit/ Leaves
8	Moraceae	*Morus alba L.*	Black mulberry	Kimbu	Kimbu	W	Fruit	Fruit
9	Moraceae	*Morus nigra*	Black mulberry	Kimbu	Kimbu	W	Fruit	Fruit/ stem
10	Musaceae	*Musa superba Roxb.*	Wild Banana	Ban Maisai	Ban mojin	W	Fruit	Fruit
11	Myriceceae	*Myrica eculanta*	Bay berry	Kafal	Kusima	W	Fruit	Fruit/ Bark
12	Myrtaceae	*Syzygium cumini / Eugenia Jambolana*	Black plum	Jamun	Gochhip	W	Fruit	Fruit/ Stem
13	Myrtaceae	*Syzygium serasiodes L.*		Kyamuna	Kyamuna	W	Fruit	Fruit
14	Rhamnaceae	*Zizyphus incurve*	Bead Plum	Hade Bayar	Hade bayar	W	Fruit	Leaves/ Fruit
15	Rosaceae	*Eriobotrya dubia*	Medlar	Jure Kaphal	Jure Kaphal	W	Fruit	Fruit
16	Rosaceae	*Pyrus pashia Buch.-Ham.*	Wild pear	Mayal	Gupasi	W	Fruit	Fruit
17	Rosaceae	*Rubus ellipticus Smith.*	Golden raspberry	Aiselu	Phachhipoun	W	Fruit	Fruit
18	Rosaceae	*Rubus paniculatus*	Raspberry	Rookh Ainselu	Phachhipoun	W	Fruit	Fruit
19	Rutaceae	*Citrus reticulate Blanco*	Orange	Suntala	Suntala	W	Fruit	Fruit
20	Sapindaceae	*Schleichra oleosa (Lour.) Oken*	Lac tree	Kusum		W	Fruit	Fruit

Table 15: Cultivated plants consumed by Pahari as root and tubers

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Discoreaceae	*Discorea alata L.*	White yam	Ghar tarul	Chheie	C	Root / Tubers	Root

Roots and tubers: Wild roots and tubers constitute important food items for Pahari. As the supply of food demands the wild variety are supplementary in the form of roots and tubers including Geetha Vyakur (air potato) and Tarul (yam). The roots and tubers used belong to 2 families, 2 genera and 8 species, of which 7 are collected from forests and rest 1 is cultivated. They implement different techniques to render these wild products palatable.

Table 16: Wild plants used by Pahari as root and tubers

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Discoreaceae	*Discorea sagittaia Royle.*	Yam	Tarul	Guhi	W	Root/ Tubers	Root
2	Discoreaceae	*Discorea esculenta L.*	Yam	Tarul	Guhi	W	Root and Tubers	Root
3	Discoreaceae	*Discorea opposditifolia*	Yam	Tarul	Guhi	W	Root and Tubers	Root
4	Euphorbiaceae	*Manihot esculenta Crantz.*	Cassava	Simal tarul	Simal Tarul	W	Root and Tubers	Root
5	Discoreaceae	*Discorea deltoidea Wall.*	Cush cush	Bhyakur	Bhyakur	W	Root and Tubers	Root
6	Discoreaceae	*Discorea pentaphylla L.*	Air potato	Chuinya (Bhyakur)	Bhyakur	W	Root and Tubers	Root/ Tuber
7	Discoreaceae	*Discorea bulifera*	Air potato	Gittha	Gittha	W	Root and Tubers	Arial tuber

Spices, Sugar: 17 plants species belonging to 11 families and 16 genera are used for spices and condiments. 16 of these are cultivated and 1 of them is wild. Some important plant species used by them are garlic, onion, chilli, turmeric, ginger, peeper, clove etc.

Table 17: Wild plants used as spice by Pahari

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Lauraceae	*Cinnamonum tamala Buch.-ham*	Cinnamom leaf	Tejpat	Dalchini	W	Spice	Leaves

Table 18: Cultivated plants used as spice by Pahari

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Amaryllidaceae	*Allium cepa L.*	Onion	Pyaj	Pyaj	C	Spice	Bulb / Leaves
2	Amaryllidaceae	*Allium sativum L.*	Garlic	Lasun	Lhawa	C	Spice	Bulb / Leaves
3	Cruciferae	*Brassica campestris var. sarryn*	Indian colza	Sarsyu	Muskuron	C	Spice	Seed
4	Labiatae	*Hyptis sauveolens*	Perilla	Silam	Malicha	C	Spice	Seed
5	Leguminosae	*Trigonella foenumgraecum Linn.*	Fenugreek	Methi	Methi	C	Spice	Seed
6	Myrtaceae	*Syzygium guajava Linn.*	Clove	Lwang	Lwang	C	Spice	Flower
7	Pedaliaceae	*Guizotia Abyssinia*		Jhuseteel	Juse teel	C	Spice	Seed
8	Piperaceae	*Piper nigrum L.*	Black peeper	Marich	Maregu	C	Spice	Fruit
9	Solanaceae	*Capsicum microcarpum DC*	Birdseye chilly	Jire khursani	Khoshni	C	Spice	Fruit
10	Umbelliferae	*Anethum graveolens L.*	Dill	Shonp	Shonp	C	Spice	Shoot / Fruit
11	Umbelliferae	*Coriandrum sativum L.*	Coriander	Dhaniya	Dhanyouncha	C	Spice	Shoot / Fruit
12	Umbelliferae	*Cuminum cyminum L.*	Cumin seed	Jeera	Jeera	C	Spice	Fruit
13	Umbelliferae	*Myristica fragrans*	Nutmeg	Jaiphal	Jeephan	C	Spice	Nut
14	Umbelliferae	*Trachyspermum ammi L.*	Lovage	Jwano	Emo	C	Spice	Fruit
15	Zingiberaceae	*Curcuma angustifolia Roxb.*	Turmeric	Herdi	Hile	C	Spice	Rhizome
16	Zingiberaceae	*Zingiber officinale Rosc.*	Ginger	Aduwa	Palo	C	Spice	Rhizome

Table 19: Plants used for extracting oil used by Pahari

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Cruciferae	*Brassica campestris var. sarryn*	Indian colza	Sarsyu	Muskuron	C	Oil	Seed
2	Cruciferae	*Brassica campestris L.*	Indian rapa	Tori	Tu	C	Oil	Leaves/ Seed

Oil: 2 species of seeds cultivated belonging to 1 family and 1 genus are used to extract oil. Spices, sugar and oil are used to enhance the taste of food and vegetables.

5.2.2.2 Non-food uses

Timber and wood: The Pahari use 24 different wild tree species belonging to 17 family and 23 genera. They own sophisticated furniture and articles of cottage industry. These tree species are used for housing and fuelwood as a source of energy.

Table 20: Plants used as timber/wood by Pahari

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Betulaceae	*Alnus Nepalensis*	Black Cedar	Utis	Busima	W	Wood / timb.	Stem
2	Bombacaceae	*Bombax ceiba L.*	Silkcotton tree	Simal	Simsi	W	Wood / timb.	Stem/ Fruit
3	Capparaceae	*Crataeva unilocu-laris Buch. Ham.*	Garlic pear	Sipligan	Sipligan	W	Wood / timb.	Leaves/ bark
4	Chenopodiaceae	*Chenopodium album L.*	Lamb's quarter	Bethe	Himchajha	W	Wood / timb.	Shoot
5	Compositae	*Artemesia vulgaris L.*	Mug-wort	Titepati	Dhwasanma	W	Wood / timb.	Leaf
6	Euphorbiaceae	*Jatropha curcas L.*	Physic nut	Sajiwan	Sajiwan	W	Wood / timb.	Bark/ Stem
7	Euphorbiaceae	*Mallotus philippensis Lam.*	Arg kamala dye	Sindure	Sindure	W	Wood / timb.	Fruit/ Stem

8	Fagaceae	*Quercus semicarpifolia*	Brown oak	Kharsu	Kharsu	W	Wood / timb.	Sem/ Branches
9	Fagaceae	*Quercus glauca*	Blue oak	Phalanth		W	Wood / timb.	Bark/ stem
10	Lauraceae	*Cinnamonum camphora*	Camphor	Kapur	Kapoor	W	Wood / timb.	Stem
11	Lauraceae	*Listea monopelata*		Kutmero	Kutmero	W	Wood / timb.	Leaves
12	Lythraceae	*Woodfordia fruticosa L.*	Fire flame bush	Dhayaro	Dhayaro	W	Wood / timb.	Flower/ stem
13	Magnolinaceae	*Michelia kisopa*		Seto champ	Champ	W	Wood / timb.	Stem
14	Moraceae	*Ficus benghalensis L.*	Banyan tree	Bar	Bar	W	Wood / timb.	Stem
15	Moraceae	*Morus alba L.*	Black mulberry	Kimbu	Kimbu	W	Wood / timb.	Fruit
16	Myriceceae	*Meliysa velutia*		Kalikath	Bulsima	W	Wood / timb.	Branch
17	Myrtaceae	*Syzygium cumini / Eugenia Jambolana*	Black plum	Jamun	Gochhip	W	Wood / timb.	Fruit/ Stem
18	Myrtaceae	*Eucalyptus* citriodora	Lemon Scented Eucalyptus	Masala		W	Wood / timb.	Branches
19	Pinaceae	*Abies spectabilis*	Fir	Gobresalla	Degma	W	Wood / timb.	Stem
20	Pinaceae	*Pinus roxburghii*	Chir pine	Salla	Salla	W	Wood / timb.	Whole plant
21	Pinaceae	*Cedrus deodara*	Himalayan cedar	Deodar		W	Wood / timb.	Stem
22	Rubiaceae	*Luculia gratissima*		Ban Kangio	Ban kangio	W	Wood / timb.	Branch
23	Theaceae	*Schima wallichi (DC) Korth.*	Needle wood	Chilaune	Chasima	W	Wood / timb.	Stem
24	Ulmaceae	*Celtis australis*	European nettlewood	Khari	Kushima	W	Wood / timb.	Stem/ Leaves

Bedding, fodder and thatching: About 2 species of plants belonging to 2 families and 2 genera are used for bedding, 42 species of plants belonging to 21 families, 32 genera are used as fodder and 4 species of plants belonging to 2 families and 4 genera are used for thatching. All of these species are wild. They use Siru, kushkush, themeda, saccharum, or sicus for thatching.

Table 21: Plants used for bedding and thatching by Pahari

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Juglandaceae	*Hardita spicata*	Engel	Mahuwa	Mahuwa	W	Bedding	Leaves
2	Anacardiaceae	*Rhus Wallichi*	Marking nut tree	Bhalayo	Chhasima	W	Bedding	Fruit/Leaves
3	Cycadecae	*Cycas pectinata Griff.*		Thakal	Thakal	W	Thatch	Leaves
4	Graminae	*Vetiveria ziza nioides*	Khus Khus	Kans	Kans	W	Thatch	Leaf
5	Graminae	*Saccharum spontaneum L.*	Thatch grass	Kans	Kans	W	Thatch	Leaves
6	Graminae	*Imperata cylindrical (L.) Beau.*		Siru	Siru	W	Thatch	Leaves

Broom and fibre: They use 2 different species of plants belonging to 2 families and 2 genera for making brooms which are sold in local market and used by them. Similarly, they use 5 wild species of fibrous plant belonging to 4 families and 4 genera. 2 of them are cultivated and rests are wild. They are bamboo, cotton, Khareto (St. John's Wart) and Amriso (boruqet grass). These plants are used for making ropes, helters, thumplines, nets and clothing. They are also used for tieing woods and thatch while constructing huts.

Table 22: Plants used by Pahari to make broom and fibre

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
A1	Graminae	*Thysanolaena maxima Roxb.*	Bouquet grass	Amriso	Tuphen	W	Broom	Floral Shoot
2	Hyperiaceae	*Hypericum uralum*	Saint John's wart	Khareto	Chhorkiri	W	Broom	Shoot
B1	Graminae	*Dendrocalamus strictus Roxb.*	Bamboo	Bans	Pura	W	Fibre	Stem
2	Sterculiaceae	*Sterculia villosa Roxb.*	Sterculia	Odal	Odal	W	Fibre	Leaves/ Stem
3	Leguminosae	*Bauhinea vehlii Wight and Arn*	Camel climber	Bhorla	Phullati	W	Fibre	Leaves

Table 23: Cultivated plants used for ceremonial purpose

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Elaeocarpeaceae	*Elaeoocarpus sphaericus Gaertn.*	Utrayum bead	Rudraksha	Rudraksha	C	Cere.	Seed
2	Amaranthaceae	*Gomphrena globosa*	Globe amaranth	Makhamali	Guisanau	C	Cere.	Flower
3	Zingiberaceae	*Hedichium spicatum*	Spiked ginger lily	Pankha Phool		C	Cere.	Flower
4	Oleaceae	*Jasminum multiflorum*	Winter jasmine	Beli	Beli	C	Cere.	Flower
5	Oleaceae	*Nyactanthes arbortristis L.*	Coral jasmine	Parijat	Parijat	C	Cere.	Flower
6	Rosaceae	*Rubus foliolosus*	Raspberry	Kalo Ainselu	Phachhipoun	C	Cere.	Flower
7	Compositae	*Tagetus erectra L.*	Marygold	Sayapatri	Phusano	C	Cere.	Flower

Table 24: Wild plants used by Pahari for ceremonial purposes

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Amaranthaceae	*Achyranthus aspara*	Chaff flower	Apamarga		W	Cere.	Whole part
2	Boraginaceae	*Trichodesma indicum*	Pyramid Flower	Kuro	Kuro	W	Cere.	Flower
3	Ericaceae	*Rhododendron arboreum*	Rhododendron	Gurans	Gurans	W	Cere.	Flower
4	Euphorbiaceae	*Euphorbia pulcherrima*	Poinsettia	Lalupate	Sirau late	W	Cere.	Flower
5	Graminae	*Cynodon dactylon (L.) Pers.*	Barmuda grass	Dubo	Sirijha	W	Cere.	Leaves
6	Graminae	*Desmostachya bipinnata (L.) Gaertn*	Kush Kush	Kush	Kush	W	Cere.	Leaves
7	Leguminosae	*Albizia lebbek*	Black Siris	Kalo Siris		W	Cere.	Flower
8	Moraceae	*Ficus religiosa L.*	Peepal tree	Pipal	Alsima	W	Cere.	Leaves/Whole
9	Nymphaecae	*Nelimbium mucifera*	Indian Lotus	Kamal	Fushima	W	Cere.	Flower
10	Oleaceae	*Ligustrum confusum*	Privet	Kanike phool	Kanike phool	W	Cere.	Flower
11	Salicaceae	*Salix sps.*	Nepolians willow	Bains	Bains	W	Cere.	Flower / stem

Ceremonial: 18 Species of plants are of ritual importance to the Pahari. Out of which there are 16 families, and 18 genera. Out of them 11 are wild and 7 are cultivated. They either worship the plants or use their flower for worshipping the Gods and Goddess and spirits. See table 24, above.

Medicine: 80 different plant species are of ethno-medical importance to the Pahari which are dealt with different separate heading. There are 61 families, and 73 genera. Out of them 70 are wild whereas 10 are cultivated.

Table 25: Cultivated plants used as medicine by Pahari

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Chenopodiaceae	*Spinacea oleracea L.*	Spinach	Palungo	Polocha	C	Med.	Leaves
2	Juglandaceae	*Juglans regia*	Walnut	Okhar	Okhar	C	Med	Seed /Bark
3	Labiatae	*Ocimum basilicum L.*	Common mint	Bawari	Bawari	C	Med.	Leaves
4	Labiatae	*Ocimun sanctum L.*	Sacred basil	Tulasi	Tulasi	C	Med.	Leaves
5	Menispermaceae	*Tinospora cordifolia Willd.*		Gurjo	Gurjo	C	Med.	Stem
6	Myrtaceae	*Psidium juajava Linn.*	Guava	Amba	Aamsi	C	Med.	Fruit
7	Oleaceae	*Jasminum arborescens Roxb.*	Tree jasmine	Chameli	Chameli	C	Med.	Flower
8	Punicaceae	*Punica gromatum L.*	Pomegranate	Anar	Dhachipan	C	Med	Fruit
9	Umbelliferae	*Trachyspermum ammi L.*	Lovage	Jwano	Emo	C	Med	Fruit
10	Zingiberaceae	*Curcuma angustifolia Roxb.*	Turmeric	Herdi	Hile	C	Med	Rhizome

Table 26: Wild plants used as medicine by Pahari

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Amaranthaceae	*Achyranthus aspara L.*	Prick chaff flower	Ultejhar	Ultejhar	W	Med.	Root/ Leaves
2	Araceae	*Acorus calamus L.*	Sweet flag	Bojho	Bojho	W	Med.	Rhizome
3	Compositae	*Ageratum Conyzoides L.*	Goat weed	Namchijhar / Gandhe	Gandhe	W	Med.	Leaves
4	Amaryllidaceae	*Allium Wallichi*	Wild garlic	Ban Lasun		W	Med.	Leaves/ bulb
5	Compositae	*Artemesia vulgaris L.*	Mug-wort	Titepati	Dhwasanma	W	Med.	Leaf
6	Liliaceac	*Asparagus recemosus Willd.*	Wild asparagus	Kurilo	Kurilo	W	Med.	Root/ shoot
7	Barberidaceae	*Berberis aristata*	Common berbery	Chutro	Chutro	W	Med.	Fruit/ bark
8	Saxifragaceae	*Bergenia ciliate Haw.*	Rock foil	Pakhambed	Pakhambed	W	Med.	Rhizome
9	Bombacaceae	*Bombax ceiba L.*	Silkcotton tree	Simal	Simsi	W	Med.	Stem/ Fruit
10	Boraginaceae	*Borago officinalis*	Borage			W	Med.	Leaves/flower/ seed
11	Verbenaceae	*Callicarpa macrophylla*		Gunyalo	Gunyalo	W	Med.	Flower/Fruit/ Leaves
12	Cannabinaceae	*Cannabis sativa Linn*	Indian hemp	Gaanja	Luchajha	W	Med.	Leaves/flower
13	Umbelliferae	*Cantella asiatica (L.) Urban.*	Water penny wort	Ghodtapre	Ghod- tapre	W	Med.	Leaves
14	Compositae	*Eupatorium adenophorum spreng*	Crofton weed	Banmara	Banmara	W	Med.	Leaves

15	Menispermaceae	*Cissampelos pareira L.*	Valvet leaf	Batule pate	Batulepate	W	Med.	Root
16	Graminae	*Coix lacrhyma/Jobi*	Job's tears	Bhirkaulo		W	Med.	Seed/ Root
17	Urticaceae	*Conostegia hirta*		Mas Lahara		W	Med.	Fruit
18	Capparaceae	*Crataeva unilocularis Buch.-Ham.*	Garlic pear	Sipligan	Sipligan	W	Med.	Leaves/ bark
19	Orchidaceae	Cureoligo orchioidies		Kalo Musali		W	Med.	Leaves
20	Cuscutaceae	*Cuscuta reflexa Roxb.*	Dodder	Akas beli	Akas Beli	W	Med.	Whole plant
21	Cyperaceae	*Cyperus rotundus L.*	Nut grass	Mothe	Mothe	W	Med.	Tuber
22	Thymelacaceae	*Daphne bholua*		Kagati pate		W	Med.	Whole Plant
23	Solanaceae	*Datura medel L.*	Timsen weed	Dhatura	Dhatura	W	Med.	Seed
24	Scrophulariaceae	*Digitalis thapsi*	Fox globe			W	Med.	Leaf/ Bark
25	Discoreaceae	*Discorea bulifera*	Air potato	Gittha	Gittha	W	Med.	Arial tuber
26	Discoreaceae	*Discorea deltoidea Wall.*	Cush cush	Bhyakur	Bhyak	W	Med.	Root
27	Discoreaceae	*Discorea pentaphylla L.*	Air potato	Chuinya (Bhyakur)	Bhyakur	W	Med.	Root/ Tuber
28	Chenopodiaceae	*Drymaria diandara BL*	Drymaria	Abhijalo	Abhijhalo	W	Med.	Shoot
29	Equisetaceae	*Equisetum debile*		Kukure ghas	Ankhalighas	W	Med.	Leaves
30	Equisetaceae	*Equisetum diffusum Don.*		Aankhijhar	Aankhijhar	W	Med.	Shoot
31	Euphorbiaceae	*Euphorbia royleana Boiss.*	Cn. Milk hedge	Siundi	Sukuma	W	Med.	Latex/ Leaf
32	Ericaceae	*Galtheria fragrantissima*	Patpate	Dhasingre	Dhasingre	W	Med.	Leaf

33	Geraniaceae	*Geranium nepalensis*	Nepalese cransbill	Chunetro ghas		W	Med.	Leaves/ Roots
34	Araliaceae	*Hedera nepalensis*		Dudhilo	Dudela	W	Med.	Leaves/ Berries
35	Zingiberaceae	*Hedichium spp.*	Hedychium	Herdi		W	Med.	Roots
36	Malvaceae	*Hibiscus rosa sinensis*		Ghanti phool	Ghanti Phool	W	Med.	Root
37	Hyperiaceae	*Hypericum uralum*	Saint John's wart	Khareto	Chhor- kiri	W	Med.	Shoot
38	Graminae	*Imperata cylindrical (L.) Beau.*		Siru	Siru	W	Med.	Leaves
39	Euphorbiacae	*Jatropha curcas L.*	Physic nut	Sajiwan	Sajiwan	W	Med.	Bark/ Stem
40	Crassurlaceae	*Kalonchoe spathulate DC*	Elephant ear	Hattikane	Hattikane	W	Med.	Leaf
41	Fagaceae	*Lithocarpus spicata*		Arkaulo		W	Med.	Leaf/ Stem
42	Lobeliaceae	*Lobelia pyramidalis*		Eklebir		W	Med.	Leaves/ Flower
43	Lauraceae	*Machilus odoratissima*		Kaulo	Kaulo	W	Med.	Leaf/ Stem
44	Euphorbiaceae	*Mallotus philippensis Lam.*	Arg kamala dye	Sindure	Sindure	W	Med.	Fruit/ Stem
45	Labiatae	*Mentha arvensis*	Peppermint	Pudina	Babar	W	Med.	Leaves
46	Leguminosae	*Mimosa pudica L.*	Sensitive plant	Lazzawati	Buharighans	W	Med.	Entire plant
47	Barberidaceae	*Mohania nepalensis*		Jamane mandro	Chutro	W	Med.	Bark/ Med.
48	Leguminosae	*Mucuna pruriens*	Cowhage	Kaunse Simi	Kaunse Simi	W	Med.	Pod
49	Myriceceae	*Myrica esculanta*	Bay berry	Kafal	Kusima	W	Med.	Fruit/ Bark
50	Haemodoraceae	*Ophiopogan Wallichianus*		Ban Supari		W	Med.	Fruit/ Tubers
51	Orchidaceae	*Oxalis corniculata L.*	Creeping sorrel	Chari amilo	Porkhojhan	W	Med.	Leaves/ Fruit
52	Liliaceac	Paris pollyphyla		Satuwa		W	Med.	Rhizome
53	Euphorbiaceae	*Phyllanthus emblica L.*	Emblic myrobalan	Amala	Amala	W	Med.	Fruit

54	Oleaceae	*Pogostemon glaber*		Rudhilo	Rudhilo	W	Med.	Leaves
55	Anacardiaceae	*Rhus javanica L.*	Nepalese rhus	Bhaki amilo		W	Med.	Leaf
56	Anacardiaceae	*Rhus Wallichi*	Marking nut tree	Bhalayo	Chhasima	W	Med.	Fruit/ Leaves
57	Euphorbiaceae	*Ricinus communis L.*	Castor plant	Ander	Ander	W	Med.	Fruit
58	Rubiaceae	*Rubia manjith*	Indian madder	Majitho		W	Med.	Root/ Fruit
59	Asteraceae	*Saussurea gossypiphora D. Don*	Costus	Kapase Phool	Ghanti Phool	W	Med.	Root
60	Sapindaceae	*Schleichra oleosa (Lour.) Oken*	Soap nut	Ritha	Ritha	W	Med.	Fruit
61	Moraceae	*Smilax aspara*	Smilax	Kukur Daino		W	Med.	Root
62	Smileaceae	*Smilax aspara L.*	Green briers	Kukur daino	Kukur daino	W	Med.	Shoot/ Root
63	Solanaceae	*Solanum anguivi Lam.*	Cherry shrub	Bihi	Bihi	W	Med.	Fruit/ Root
64	Solanaceae	*Solanum xanthocarpum Schrad.*	Yellow berried night shade	Kantakari	Kantakari	W	Med.	Fruit
65	Gentianaceae	*Swertia angustifolia Buch.-Ham*	Chiretta	Chiraito	Chiraito	W	Med.	Shoot
66	Combretaceae	*Terminalia chebula Retz.*	Cheb myrobalam	Harro	Harro	W	Med.	Fruit
67	Ranunculaceae	*Thalictrum foliolosum*	Meadow rue	Dampate		W	Med.	Roots
68	Valerianaceae	*Valeriana jatamasi*	Common valerian	Sugandhwal		W	Med.	Whole plant
69	Verbenaceae	*Vitex negundo L.*		Simali	Simali	W	Med.	Leaves
70	Lythraceae	*Woodfordia fruticosa L.*	Fire flame bush	Dhayaro	Dhayaro	W	Med.	Flower/ stem

Miscellaneous: The Pahari use different plants as fish poison and incenses, intoxicants and many more. They belong to 14 families, 16genera and 16 species which all are wild except 4, for they are cultivated.

Table 27: Plants used by Pahari for miscellaneous purpose

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Chenopodiaceae	*Drymaria diandara BL*	Drymaria	Abhijalo	Abhijhalo	W	Intox.	Shoot
2	Solanaceae	*Datura medel L.*	Timsen weed	Dhatura	Dhatura	W	Intox.	Seed
3	Fagaceae	*Castanopsis tribuloides (Sm.) DC*		Musure katus	Shishma	W	Fuel	Stem/Branches
4	Salicaceae	*Salix sps.*	Nepolians willow	Bains	Bains	W	Fuel	Flower/stem
5	Meliaceae (d)	*Melia azadarach L.*	Persian lilac	Bakaino	Khachhima	W	Fuel	Leaves/ Branches
6	Fagaceae	*Lithocarpus spicata*		Arkaulo		W	Fuel	Leaf/ Stem
7	Theaceae	*Thea sinensis L.*	Tea	Chiya	Chiya	C	Drink	Leaves
8	Graminae	*Saccharum Officinarum L.*	Sugarcane	Ukhu	Tuma	C	Juice	Stem
9	Labiatae	*Hyptis sauveolens*	Perilla	Silam	Malicha	C	Pickle	Seed
10	Solanaceae	*Nicotiana rustica L.*	Tobacco	Surti	Bajaun Lati	C	Smoke	Leaves
11	Lofaniaceae	*Buddlua asiatica*	Butterfly bush	Bhimsen pati	Sinasuno	W	Fish poi.	Leaves
12	Rubiaceae	*Xeromorpis spinosa Thunb.*	Cn. Emetic nut	Maidal		W	Fish poi.	Fruit/ Thorn
13	Euphorbiaceae	*Sapium insigne*	Tallow tree	Khirro	Khircha	W	Poison	Milky Latex
14	Graminae	*Eulaliopsis binata Retz.*	Sabai grass	Babiyo	Babiyo	W	Rope/Thread	Root/ Leaves
15	Lauraceae	*Cinnamonum tamala Buch.-ham*	Cinnamim leaf	Tejpat	Dalchini	W	Spice	Leaves
16	Santalaceae	*Osyris wightiana*		Nun dhiki	Nundhiki	W	Tea	Leaves

Table 28: Plants used by Paharis for bio- fencing

S. N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part/s used
1	Agavaceae	*Agave cantula*	Century plant (agave)	Kettuke	Kettuke	W	Bio-fencing	Whole plant
2	Barberidaceae	*Berberis aristata*	Common berbery	Chutro	Chutro	W	Bio-fencing	Fruit/ bark
3	Barberidaceae	*Mohania nepalensis*		Jamane mandro	Chutro	W	Bio-fencing	Bark/ Med.
4	Rhamnaceae	*Zizyphus incurve*	Bead Plum	Hade Bayar	Hade bayar	W	Bio-fencing	Leaves/Fruit
5	Rosaceae	*Rosa microphylla*	Edward Rose	Jungali Gulab	Phusuno	W	Bio-fencing	Whole plant
6	Rosaceae	*Pyracantha crenulata*	Fire thorn	Ghangaru		W	Bio-fencing	Whole plant
7	Rosaceae	*Rubus ellipticus Smith.*	Golden raspberry	Aiselu	Phachhipoun	W	Bio-fencing	Fruit
8	Rutaceae	*Xanthoxylum armetum / alatum*	Prickly ash	Timur	Timur	W	Bio-fencing	Fruit
9	Verbenaceae	*Duranta repens*	Pigeon berry	Nilkanda	Nilkanda	W	Bio-fencing	Whole Plant

Bio-fencing/Live fencing: They use different plants for fencing. Out of which there are 6 families, 9 genera and 9 species which all are wild. See table 28.

5.3 Medico-ethnobiology

The Pahari depend extensively on wild plants and animals for their health care and treatment. Altogether 8 species of animals belonging to 5 orders and 5 genera are considered to be of some sort of medicinal importance to the Pahari society. Most of the animal species are wild. They make use of some 80 species of plants belonging to 61 family and 73 genera for treatment of various ailments ranging from simple cuts and burns to internal bodily disorders i.e. urinary disorder, asthma, diabetes, etc. Out of these 80 species 70 are obtained from the forest and remaining 10 species are grown by themselves. They use different parts of these plants, from roots to flowers as medicine. They use some of the plants or their parts with different preparation or making paste, juice, decoctions, or powder of these parts to work out important drugs out of them. The plants and animals and their medicinal uses are presented (table 37). Pahari people use 8 animals to cure 7 diseases and 80 plants to cure 31 diseases.

The medicinal plants are used to cure 31 different diseases or ailments (table 37). They use 12 plants to treat various abdominal and stomach troubles like colic etc., 2 for anorexia (inappetite), 1 for biliousness, 3 for chest pain, 7 for constipation, 8 for cough, cold, influenza, and sinus, 8 for cuts and wounds (as haemostatic, antiseptic and astringent), 1 for diabetes, 20 for diarrhea, dysentery and cholera, 2 for eye problem, 4 for fever, 3 for gastritis, 11 for gout, for mouth ulcer, cramps, sprain and swelling, 2 for peptic ulcer, 5 for different skin problems like boils, blisters, eczema, itching, ringworm and scabies, 3 for snake bite and scorpion sting, 2 for conjunctivitis, 6 for throat troubles like sore-throat, laryngitis, pharynxytis, asthma, and bronchial catarrh, 3 for tooth problems like dental caries and swollen gums, 3 for typhoid and 3 for urinary troubles and calculus. The procedure of extraction of drugs out of the plant is also simple. They use the plants or their parts directly make decoction, juice, or paste out of them simply by meshing in a rock mortar. Similarly the animals of medicinal importance find use in treatment of some 5 diseases or ailments like blood and heart related diseases, tuberculosis, fracture, malaria, and unconsciousness etc. (Table 36).

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CHAPTER VI

6. DISCUSSION

6.1 Discussion

Pahari are found deprived, disadvantaged and marginalized indigenous group in Nepal because of their poor involvement in participation and policy making in the development activities. Though they are habitant within the valley, they are uneducated and surviving with basic life standard and minimum ideas to maintain hygiene and sanitation. The income generated by them is found wasted in feasts, drinking, and gambling.

The status of the Pahari shows that their originality is little similar to Tamang ethnicity with their physical appearance and by language they are nearer to Newar ethnic group. So, legend shows of their rural and undeveloped areas residence from the past, makes them backward from main stream of national development and opportunities (Thapa Magar and Gautam, 1994).

Pahari, the marginalized indigenous nationality in Nepal as per CBS census record 2001 the total population was 11,505 in Nepal. The population growth rate among Pahari is high. The lack of education is responsible for the growth of population rapidly and vanishing of culture and tradition.

The Pahari people are gradually improving towards better life style and education. Now-a-days few educational institutions are established around the locality. Beside those educational institutions, the children are sent in different modern public and private institutions in the valley away from local area. The young generation is provided with scholarship provision though that is insufficient as per the requirement. The higher education among the Pahari is rare, so they need to be motivated towards higher education in the society.

Regarding religious and cultural point of view, they are follower of Hindu religion and partially Buddhism. They worship gods and goddesses like Ganesh, Devi and Bhairab as their ancestral God in each home. Most of the celebrations and practices are similar with that of Newars. The caste division system as upper and lower is influenced with Newar. Survey shows that some Pahari desire to be described as Pahadi or Nagarkoti so that they could get the opportunity in different services and jobs (Nepali, 1995). The Pahari have series of lifecycle rites as they follow in recent years.

After the study and observation, the findings describe that Pahari with their external appearance are closer to Tamang and culturally closer to Newars. The linguistic dialect though not identical, but majority of linguistic terms are similar to Newari terms.

Originally Pahari might have inhabitated Dailekh of Mid-Western Development region and spread to other parts. They have Buddhist influence though they observe the Hindu celebrations and practices in general. Pahari are traditionally involved in domestic crafts activity like making baskets and other bamboo items of bamboo crafts of cottage industry. Recently they are also found occupied in agriculture, business government or private services and labour activity in rare amount.

The population of Pahari in Nepal is 11,505 (CBS, 2001). The education is quite low among Pahari. During the study period the SLC passed Pahari are more than dozen and less than half dozen are graduates. Recently Pahari children are studying in different private and public schools as they are aware about the new inclusiveness and development in the state.

The population growth rate is high. The few Pahari are recently changing their surname to Nagarkoti, Loppa, Bode, Pahadi and other different caste without clear history, language (alphabet), religion, culture and their preservation. In 1854 BS, Jung Bahadur Rana kept all the TibetoBurmese language people in scheduled tribe (Matwali) and kept in the second class among Hindu and classified as destroying and non-destroying two classes (Bhattachan, 1993).

The study on Pahari's indigenous knowledge system reveals that they have sound knowledge of habit, habitat, behaviour and importance of bioresources in their surroundings. The knowledge of food gathering, processing, indigenous craft making, liquor production, honey extraction, honey bee rearing, bamboo pickling with conservation and utilization of resources significant as their back bone of economy with sustainable survival and conservation of traditional indigenous systems.

Inspite of these vast spectrums of indigenous knowledge, the Pahari are isolated and marginalized below the general living standard.

Pahari as well as other indigenous groups like Raute (Singh, 1995), Kumals (Dhakal, 1997), Chepang (Manandhar, 2000 and Karki, 2001) Satars (Koirala, 2005), Bankariya (Pokhrel, 2006), and are under the verge of assimilation with other cultures. They are nowadays adopting themselves with other Hindu cultured Brahmin and Chhetri ethnicity.

The present study made on the Pahari reveals that they are very much aware with traditional ethnobiological skills. They rarely consider the biological resources to be dependable though they are enriched with biological resources that existed around them. As the objectives of study is to make documentation on flora and fauna, there are 38 different fauna both wild and domesticated and 284 plants as wild and cultivated with different utilities.

The present documentation is below the level of floral and faunal use as in the past because of modernization with different facilities i.e. health, transportation and education they are motivated towards modern scientific utility and knowledge departure then away from their indigenous knowledge with utility of flora and fauna as used in the past. The report on ethnobiology from different areas i.e. Makwanpur district the number of plants used by Chepangs is 354 and animals 127 species (Manandhar, 2000) and plants used by Bankariyas 268 species and fauna 58 species (Pokhrel, 2006).

The Pahari in Badikhel VDC nowadays are becoming less dependent on nature and motivated towards conservation of bioresources around them. The animal species used by Pahari are 38, out of these mostly they are utilized similarly as Newars. The use of animals is not so significant among the Pahari presently.

The non-vegetarian habit among the Pahari people is common. The endemic Piscean fauna are nowadays rarely used by them though they used in the past. The study made on Pahari shows 14 mammals, 12 birds, 3 fishes and 10 invertebrates including mollusk, insects, crustaceans, arachnids and oligochaetes. Out of 38 animals 31 are wild and 7 are domesticated.

The ethnobotany of Pahari reveals that they use 284 plant species, out of which 180 species are wild and 104 species are cultivated. Out of 284 plant species 9 are cryptogams and rest 275 phanerogams. The total families of plant species are 86 and 202 genera. The used category of plants are various such as vegetables, fruits, cereals, pulses, oils, etc., as food; whereas timber, fodder, fibres, medicines and many more with the ritual values are non-food category. The finding reveals that they use 60 plant species as vegetables, 41 fruits, 8 roots and tuberous food, 8 cereals, 14 pulses, 17 spices, sugars and 2 plants as oil.

They use 24 species for timber/wood, 2 species for bedding, 42 species as fodder, 4 species for thatching, 18 species for ceremonial and ornamental, 2 species for broom, 5 species for fibre, 3 species as fish poison, 1 species for smoking, 2 species as intoxicant, 2 species for making pickle, 1 species to make thread, and 3 species as drinks. They use 80 species of plants with medicinal importance and 9 species as bio-fencing or life fencing. The plants in majority have multiple utility as they are mentioned by different researchers (Koirala, 2004, and Pokhrel, 2006) with a similar report. In the same manner the ICIMOD Godawari has reported the different flora of the area in four mini-water shed and 12 mini sub-catchment areas with multi-purpose use of plant species.

During their past time when health services were not available they used to use various plant and animal species for the cure and treatment of different health problems or ailments. They use the species in different way.

Among the 38 species used by Pahari, 8 species are considered to be of medicinal use in the treatment of 7 different diseases or ailments. 8 species out of 38 animal species with the medicinal importance are reported from the Bankariyas of Makwanpur district, Handikhola VDC (Pokhrel, 2006). This study has also reported 8 species used by Pahari. The use of different species are for healing wounds, dysentery, heart problems, TB, fracture of bones, etc.

The Pahari are found to use 80 floral species for the cure of 31 different diseases or ailments. Out of these 45 species were also listed for the Bankariyas of Makwanpur (Pokhrel, 2006) and 30 species by Satars of Korobari VDC Jhapa (Koirala, 2004).

56 species of these medicinal plants are listed by ICIMOD Godawari of different medicinal utilities, those available in the areas having common ecological scenario in the adjacent area. 32 species of plants mentioned in the report are also mentioned in the collection of medicinal plants book published by Ministry of Forest and Soil Conservation, Department of Medicinal Plants (GON, 2001). The medicinal plant species are found to be used in different ways by different ethnic groups. For example *Acorus calamus* was reported for stomachache (Parajuli et.al., 1998).

The Pahari people use *Acorus calamus* for sore throat and laryngitis. Some plants by Paharis are used for multi-purpose as *Artemesia vulgaris* for skin diseases, diarrhoea, antihelmintic, headache, fever, etc. The same was reported by others as (Pokhrel, 2006) in Bankariyas of Makwanpur district.

The *Cantella asiatica* is found useful in different ailments i.e. gastritis, indigestion, appetizer, throat trouble and others (Pokhrel, 2006). Pahari are found to use less number of plants for medicinal purposes in comparison to other ethnic groups reported by earlier studies. Some of them are *Gaultheria fragrantissima*, *Woodfordia fruticosa*, *Myricia esculenta*, *Mohania nepalensis* and *Allium wallichi* the number of

plant species are conserved in large extent on the care of department of forestry and national herbarium Godawari in the nearer site.

Though the use of forest resources is increasing day by day with the pace of human population growth, conservation initiates are not satisfactory. The Pahari are greatly utilizing the local resources. But degradation of vegetation due to overexploitation and influences of urbanization on their culture and local environment has halted the maintenance of balance for sustainable development. Still more efforts are to be made to enhance the conservation skill and ideas to maintain proper diversity in different aspects of natural resources.

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CHAPTER VII

7. CONCLUSION AND RECOMMENDATION

7.1 Conclusion

Based on the present investigation of the Pahari, the following concluding remarks have been derived.

- The Pahari is a backward, isolated, indigenous, marginalized nationality and unstratified. Though they are residents of the valley, they are deprived, away from development and opportunity, and are dominated by non-Pahari tribes. They are supposed to be the hybridized combination of Tamang and Newars. The population growth rate is high among Pahari.
- The Pahari are well equipped with resources and craftsmen skills, importance of cottage industry i.e. bamboo crafts and other timber products. These skills support the economy and basic survival of Pahari.
- The Pahari are enormously resourceful in terms of ethnobiological norms and conditions. They use 38 animal species as wild and domesticated and 284 species floral species (both wild and cultivated) for various uses in different requirements.
- The Pahari use 8 different faunal species for the treatment of different 7 ailments and 80 floral species with medicinal importance to treat and cure 31 different diseases and ailments ranging from simple cuts and wounds to internal abnormalities, i.e. urinary, gynecological disorders, diabetes, typhoid, jaundice, etc.
- From the practice in the ancestral time they have been formulating and accumulating the use of different organism differently and inherited into new generations. Since this should be recognized and transferred with preservation.
- Due to ignorance and negligence, Pahari are compelled to over exploit the natural resources which are valuable in different aspects could be vanished in future if depletion is continued in the same manner in the locality.
- The Pahari need to be assisted with awareness programs and involved in participation and conservation activities of nature and natural resources and cultural heritage that have been practiced from the past history.

7.2 Recommendations

The following recommendations are given to the concerned agencies:

1) Awareness generation

Pahari people are traditional and conservative. So, they need to be educated and trained about health and sanitation, social evils and caste discrimination, alcoholism and smoking. Though Pahari are nearer to valley they lack modern education and development. The educated people are rare as till date less than half dozen graduates

are there in Pahari community based on the study area. Due to lack of sanitation and personal hygiene people are suffering from different communicable diseases and suffering with different health problems. Most of the traditional Pahari have occasional drinking of alcohol and smoking which should be controlled.

2) Conservation awareness

The study area (Badikhel VDC) is rich in forest resource and natural environment where dense forest with rich plant diversity is available. There are so many valuable plants with multiple uses. Prevention of forest fire and over-exploitation of the natural resources is necessary for this conservation, and environmental programs should be directed to make local people aware of their environment and resources available around them.

3) Craft production and cottage industry

Pahari are famous for skillful bamboo crafts and natural fiber productions. They produce varieties of bamboo products and different productions from animal and plant resources. The managed and systematized use of resources could be wisely used so that sustainable and prosperous development could be practiced.

4) Livestock rearing and horticulture

Badikhel VDC looks feasible and local people are also interested in for horticulture and livestock, with plenty of resources, as the VDC's more than one-third is covered with forest or vegetation. The climate and productivity is supportive and sustainable towards livestock and horticulture. So, Pahari people are to be encouraged to enhance such economically sustaining profession like horticulture and livestock rearing.

5) Skill enhancement

Though Pahari are skilled regarding bamboo crafts-work, cottage industry and agriculture, this area can be improved with the use and utilization of resources around them. Wise use and collection of herbal and cash crop plants should be encouraged to improve their economy. They should be trained with modern skills and techniques to improve their economy.

6) Integrated approach

Different NGOs and INGOs should launch different programs with public participation regarding the conservation of traditional and cultural aspects of Pahari people to maintain their identity for future generations to come with surrounding ecological diversities.

7) Protection and conservation of culture and rituals

The culture and rituals of Pahari are nowadays found to be decreasing because of its lessened practice and performance. The new generation is not aware about their

traditional custom, language tradition, rituals inherited from their ancestors. Gradually, if culture and rituals are forgotten by them it may lead to loss of their identity and originality. For this, they should be aware and follow their traditional culture and ritual to maintain their identity with proper adaptation.

8) Enhancement of reservation

Pahari are less aware and educated as they are not supported by the government in education and opportunities. They should be given opportunities by fixing reservation for various education opportunities, with technical and non-technical skills in different fields.

9) Biological analysis

The biotic resources (plants and animals) are directly associated with their daily lives in terms of medicinal values. Due to modernization they are avoiding the use of herbal medicine for which there should be bio-chemical analysis for the wise and active for chemical and curatives mechanism. This will lead to conservation and utilization of resources and prevent unwanted expenditure and chemical affect of chemically processed medicines.

10) Basic infrastructures

Though the study area is within the valley, but the developmental infrastructure among Pahari ethnic group is not worth-mentioning in comparison to others. The facility of health, education, transportation, electricity is not sufficient which are linked for their social, economic and educational advancements. Lack of drinking water has to be resolved and irrigation should necessarily be improved for enhancement of agricultural production.

11) Non-timber forest products (NTFPs)

The Pahari are inherited with extensive knowledge of non timber products and they are naturally supplied with NTFPs in their surroundings. The proper and systematic knowledge of use of NTFPs can lead to improve economy by wise and proper use of these resources. A sustainable resource management policy should be formulated and implemented to facilitate judicious and efficient utilization of the resources and equitable sharing of the benefits.

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Annex 1:

Checklist and questionnaire

A. Checklist

- Peoples' names, address, email, phone contact, etc.
- Names of trees, plants and animals
- Local language names and words – names of trees, plants, birds, animals, fish, place names.
- Fruit trees, garden plants and food eaten, medicinal plants, spiritual plants, nitrogen fixing trees (NFTs), living fence plants, flowers, fruits and leaves used in leis, etc..
- Activities that people carry out, times allocated for activities, people involved (e.g., how many people selling tree products, firewood, etc. on a given day).
- Schedules of daily activities
- Phenology, flowering, fruiting times, etc.
- Planting, germinating times/rates, , growth rates, etc of trees
- Seasonality of fruit, presence or absence in market.
- Important historical events (e.g., tropical cyclones, droughts, disease outbreaks, tidal waves, landslides, volcanic eruptions, etc.).
- Cultural values and traditions that should be followed when in villages/doing fieldwork.
- Drawing or sketches of gardens, leaves, fruit, village layout, etc.
- Sketch maps of an area, garden, agroforestry, reef, island, etc.
- Cross sections or transects (e.g., from the intertidal zone across the beach and across the sand dunes, mangroves or an island; from the coast to the top of the mountains or hills).
- Diagram of community social structure and names of leaders.
- Failures, problems, obstacles to a project, programme or development in general.
- Staple/cello tape handouts to notebook (i.e., include handouts, e.g., photos, maps and other handouts in notebook).
- Tape samples of appropriate specimens in book with related notes (e.g., leaves, etc.).
- Use Polaroid/digital cameras etc to make photos for putting in notebook.
- Information on climate, tides, time of day, dates.
- Names of places, pieces of garden land, reefs, beaches, points or capes, forests, villages, etc.
- Reason for visiting a place.
- Starting and finishing times.

- Comments, recommendations.
- Hours worked, spent in the field by you or others.
- List of things observed.
- Information on income, expenditures (accounting information)
- Receipts (could be placed in an envelope taped to the back cover of the notebook).
- Recommendation and conclusions.
- Quotes, words of people, promises, their comments, etc.
- List of gifts favours, hospitality given by the people to you or by you to the people/informants.
- Problems faced by the people.
- List gender by names
- Settlement pattern (information map, housing pattern, etc)
- Number of participants, feedback, input etc.
- Information on methods/system used for collecting information (Note: it is easier to write down methods used, sample numbers, distances, number of items inventories and exact systems used for inventories while you are doing it rather than having to remember it later).
- Traditional and modern conservation practices used.
- Boundaries of area studied/covered, etc.
- Notes on lectures presented
- Notes on relevant reading related to a given topic covered by the notebook)
- Ideas that pop into your head! (could be designated by "me" written on the margin of the page)
- Predictions on what will happen.

Note: Checklist sources are *Chaudhary, RP (*1998) and ethnobiology held note retrieved from **https://classshares.student.usp.ac.fj *of* The University of the South Pacific School of Geography and theses on ethnobiological studies carried out in Nepal.**

B. Questionnaire

Date of interview:……

A: Village/beliefs

1. Name, age, and present address:
2. Place of birth:
3. For how long you have been staying in this place? Where were you before?
4. How do think this place got its name?
5. How old is this village?
6. How many temples, gumbas, chaityas, and caves are there in this village?
7. What other heritages are found in this locality?
8. What are the main festivals of this locality? How are they celebrated?
9. According to you, what differences can you see 50 years ago and today's situation in terms of religious thinking among the people?
10. What religious and cultural degradation have you noted in your locality? How do you think this can be solved?
11. What other castes of people/ethnic groups are found in the locality?
12. Do the people believe in superstition, why do you think so?
13. What benefits are gained by believing in superstitions?
14. How long this superstition is going on in this village?
15. Has the superstitious belief helped the people in their lives, in what ways?
16. What according to you should the country step into modernization?
17. What degradation can the modernization bring in the society? What can be done to safeguard culture, religion and tradition?
18. At what age did you marry and how many children and grand children do you have now?
19. Give details about your family background.
20. What message would you like to give to the general masses on religion, culture and tradition?

B: Festivals

1. Name of the festival/s:……....
2. Time of the festival:……..
3. Why is this festival celebrated?
4. What things are bought for you by people to celebrate this festival?
5. What recipes (foods) are cooked during this festival?
6. Which deities are basically worshipped during this festival?
7. Which temples/places are visited during this festival?
8. What important things have you observed/do you observe during this festival?
9. How many people visit/ed you and which relatives are visited visit/ed during this festival? Why?
10. Where else do/did you visit during this festival?
11. How much money do you think is spent to celebrate this festival?

Caste/Customs/Tradition	Name/How are they done?
Birth rites	
Marriage rites	
Death rites	
Main festivals	
Local festivals	
Main Language	
How do they say, “I love my country and countrymen”	
Main food items	
Main religion	
Main deities	
Main dress	
Main ornaments, etc.	
Originally belong to which place	

C: Religion/tradition, etc.

Information to be gathered	Elderly Person	Young person
Name		
Address		
Education		
Favourite dress		
Favourite food		
Favourite book		
Which religion		
Do you pray daily?		
No. of temple visit in a week		
Watch movies, if so what types?		
Favourite songs or *bhajans*?		
Belief in religion (yes/no)		
View on western culture		

Annex 2:

Tables (flora and fauna)

Animal Species of Ethnic importance to Paharis

Table 29: Invertebrates

S. N.	Order	Family	*Animal Species*	Common Name	Local name	Pahari Name	Habit	Use
1	Stylomatophora (Mollusc)	Helicidae	*Anadenus sp.*	Slug	Chiplekira	Khahsa	W	Medicine
2	Hymenopetra (Insecta)	Apidae	*Apis dorsata*	Wild honey bee	Jungali mauri	Gunswanma	W	Honey/larvae
3			*Apis cerana*	Honey bee	Ghar mauri	Dhuswanma	W	Honey/larvae
4		Sphigidae	*Hornet*	Hornet	Aringal	Tasa	W	Larvae/med
5		Vespidae	*Vespa sp.*	Wasp	Barula	Jhekcha	W	Larvae/med
6		Formicidae	*Myrmica rubra*	Red ant	Rato kamila	Mijan	W	Meat
7	Decapoda (Crustacean)	Canceridae	*Cancer sp.*	Edible crab	Gangata	Kwya	W	Meat
8	Arania (Arachnid)	Araneae	*Araneae sp.*	Spider	Makura	Kurmou	W	Medicine
9	Opisthopora (Oligochaetes)	Megoscolecidae	*Pheretima sp.*	Earthworm	Gadyaula	Dubi	W	Medicine

Table 30: Avian Fau

S. N.	Order	Family	*Animal Species*	Common Name	Local name	Pahari Name	Habit	Use
1	Anseriformes	Anatidae	*Tandorna feruginea*	Brahmiy duck	Hans	Huincha	D	Meat
2	Columbiformes	Columbidae	*Columba livia*	Blue rock pigeon	Parewa	Parewa	W	Meat
3			*Streptopelia chinensis*	Spotted dove	Dhukur	Bunkhi	W	Meat
4			*Treron bicineta (Hodson)*	Pigeon	Parewa	Deobunkhi	W	Meat
5	Galliformes	Phasinidae	*Francolinus frncolinus (Hodson)*	Black patridge	Titra	Titri	W	Meat
6			*Francolinus gularus*	Swamp patridge	Titra	Titri	W	Meat
7			*Lophura leucomelana (Kirk Patrick)*	Kalij fowl	Kalij	Tunkha	W	Meat
8			*Gallus gallus (Hodson)*	Red jungle fowl	Luinche	Bunkha	W	Meat
9			*Gallus gallus domesticus (Hodson)*	Common fowl	Kukhura	Kha	W	Meat
10	Passeriformes	Pychonotidae	*Phychonotus tristis*	Red vented bulbul	Jureli	Pinj	W	Meat
11		Turdinae	*Copsychuns saularis*	Robin	Dhobini	Tejhunga	W	Meat
12	Psittaciformes	Psittacidae	*Psittacula krameri (Hodson)*	Parakeet	Suga	Suga	D	Pet

Table 31: Pisces

S. N.	Order	Family	Animal Species	Common Name	Local name	Pahari Name	Habit	use
1	Channiformes	Channidae	*Channa gachua*	Asiatic snakehead	Hile	Chamu	W	Meat
2			*Channa punctatus (Bloch)*	Spotted snakehead	Hile	Khiringo	W	Meat
3			*Channa striatus (Bloch)*	Banded snakehead	Hile	Khiringo	W	Meat

Table 32: Mammals

S. N.	Order	Family	Animal Species	Common Name	Local name	Pahari Name	Habit	Use
1	Artidactyla	Bovidae	*Bos indicus (Linn)*	Cattle	Gai/Goru	Saa	D	Agriculture/ Ceremony
2			*Bubalus Bubalis (H. Smith)*	Buffalo	Bhainsi/Ranga	Mesa	D	Meat
3			*Capra hircus (Linn)*	Goat	Bakhra	Chila	D	Meat
4		Cervidae	*Axis axis (H. smith)*	Spotted deer	Chittal	Ghuin	W	Meat
5			*Cervis unicolor (L.)*	Sambhar	Jarayo		W	Meat
6			*Muntiacus muntijak (Rafin)*	Barking deer	Ratuwa		W	Meat
7	Carnivore	Canidae	*Canis aureus (L.)*	Jackal	Syal	Ghon	W	Medicine
8			*Canis familiaris (L.)*	Domestic dog	Kukur	Kujun	D	Pet
9		Felidae	*Felis catus (L.)*	Domestic Cat	Biralo	Bhin	D	Pet
10			*Felis Chaus*	Wild Cat	Ban Biralo	Gubhin	W	Medicine
11			*Melursus Ursinus*	Sloth bear	Bhalu	Bhalu	W	Medicine
12	Chiropetra	Pteropodida	*Pteroposus sp.*	Bat	Chamero	Chamero	W	Medicine
13	Lagomorpha	Leproidae	*Lepus nigricollis (L.)*	Indian hare	Kharayo	Kharaicha	W	Meat
14	Rodentia	Leproidae	*Lepus indica L.*	Indian porcupine	Dumsi		W	Meat / Medicine

Table 33: Plant species of ethnic importance to Pahari

(Habit: w-wild and c-cultivated, Veg.- Vegetable; Med.-Medicine; Timb.-Timber, Fodd. – Fodder; Bed.- Bedding; Cere.- Ceremony; Intox.-Intoxicant,)

S.N.	Family	Plant Species	Common Name	Local Name	Pahari Name	Habit	Use	Part(s) used
1	Agaricaceae	*Agaricus biporus*	Edible Mushroom	Gobre Chyau	Parkhi Mhi	W	Veg.	Thallus
2	Agaricaceae	*Amantia sp.*		Sal Chyau	Sal Mhi	W	Veg.	Thallus
3	Agaricaceae	*Amantia sp.*		Salle chyau	Sirau Mhi	W	Veg.	Thallus
4	Agavaceae	*Agave cantula*	Century plant (agave)	Kettuke	Kettuke	W	Bio-fencing	Whole plant
5	Amaranthaceae	*Amaranthus virdis*	Amaranth	Latte	Bagun	W	Veg.	Shoot
6	Amaranthaceae	*Amaranthus caudatus L.*	Spiny pigweed	Seto lunde	Bagun	W	Veg.	Shoot
7	Amaranthaceae	*Achyranthus aspara L.*	Prick chaff flower	Ultejhar	Ultejhar	W	Med.	Root/ Leaves
8	Amaranthaceae	*Gomphrena globosa*	Globe amaranth	Makhamali	Guisanau	C	Cere.	Flower
9	Amaranthaceae	*Amaranthus spinosus L.*	Spiny pigweed	Rato lunde	Sirau bagun	W	Veg.	Shoot
10	Amaranthaceae	*Achyranthus aspara*	Chaff flower	Apamarga		W	Cere.	Whole part
11	Amaryllidaceae	*Allium sativum L.*	Garlic	Lasun	Lhawa	C	Spice	Bulb / Leaves
12	Amaryllidaceae	*Allium cepa L.*	Onion	Pyaj	Pyaj	C	Spice	Bulb / Leaves
13	Amaryllidaceae	*Allium Wallichi*	Wild garlic	Ban Lasun		W	Med.	Leaves/ Bulb
14	Anacardiaceae	*Magnifera indica L.*	Mango	Aamp	Aamp	C	Fruit	Fruit
15	Anacardiaceae	*Rhus Wallichi*	Marking nut tree	Bhalayo	Chhasima	W	Med./Fodd./ Bed.	Fruit/Leaves

16	Anacardiaceae	*Choeros communis axillaris*	Nepalese hog plum	Lapsi	Gopama	W	Fruit	Fruit
17	Anacardiaceae	*Rhus javanica L.*	Nepalese rhus	Bhaki amilo		W	Med.	Leaf
18	Araceae	*Colocasia fallax Schott*	Wild cocoyam	Jangali Karkalo	Ban Fagun	W	Veg.	Young shoot/Stem
19	Araceae	*Acorus calamus L.*	Sweet flag	Bojho	Bojho	W	Med.	Rhizome
20	Araceae	*Colocasia antiquorum var. esculenta*	Cocoyam	Karkalo	Fagun	C	Veg.	Young shoot/Stem
21	Araceae	*Alocasia endicum Schott*	Alocasia	Pindalu	Fagun	C	Veg.	Stem
22	Araliaceae	*Hedera nepalensis*		Dudhilo	Dudela	W	Med.	Leaves/Berries
23	Araliaceae	*Brassiopsis hainla*	Hattipaile	Hattipaile		W	Fodd.	Stem/branches
24	Aspidiaceae	*Dryoathyrium boryanum Willd.*	Wild fern	Kalo niuro	Wanra	W	Veg.	Shoot
25	Aspidiaceae	*Diplazium esculentum*		Pani Neuro		W	Veg.	Leaves
26	Asteraceae	*Saussurea gossypiphora D. Don*	Costus	Kapase Phool	Ghanti Phool	W	Med.	Root
27	Barberidaceae	*Berberis aristata*	Common berbery	Chutro	Chutro	W	Med./bio-fencing	Fruit/bark
28	Barberidaceae	*Mohania nepalensis*		Jamane mandro	Chutro	W	Med./ Fruit /bio-fenc.	Bark/Med.
29	Betulaceae	*Alnus Nepalensis*	Black Cedar	Utis	Busima	W	Wood/timb.	Stem
30	Bombacaceae	*Bombax ceiba L.*	Silkcotton tree	Simal	Simsi	W	Med. /Timb.	Stem/Fruit
31	Boraginaceae	*Trichodesma indicum*	Pyramid Flower	Kuro	Kuro	W	Cere.	Flower
32	Boraginaceae	*Borago officinalis*	Borage	Borage		W	Med.	Leaves/flower/seed
33	Cannabinaceae	*Cannabis sativa Linn*	Indian hemp	Gaanja	Luchajha	W	Med.	Leaves/ flower

34	Capparaceae	*Crataeva unilocularis Buch-Ham.*	Garlic pear	Sipligan	Sipligan	W	Med. /Timb.	Leaves/ bark
35	Caricaceae	*Carica papaya L.*	Papaya	Mewa	Mewa	C	Fruit	Fruit
36	Chenopodiaceae	*Drymaria diandara BL*	Drymaria	Abhijalo	Abhijhalo	W	Intox./Med.	Shoot
37	Chenopodiaceae	*Chenopodium album L.*	Lamb's quarter	Bethe	Himchajha	W	Fodd. /Wood.	Shoot
38	Chenopodiaceae	*Spinacea oleracea L.*	Spinach	Palungo	Polocha	C	Med./Veg.	Leaves
39	Combretaceae	*Terminalia chebula Retz.*	Cheb myrobalam	Harro	Harro	W	Med.	Fruit
40	Compositae	*Artemesia vulgaris L.*	Mug-wort	Titepati	Dhwasanma	W	Med. / Timb.	Leaf
41	Compositae	*Ageratum Conyzoides L.*	Goat weed	Namchijhar/Gandhe	Gandhe	W	Med.	Leaves
42	Compositae	*Eupatorium adenophorum Spreng*	Crofton weed	Banmara	Banmara	W	Med./ Fodd.	Leaves
43	Compositae	*Tagetus erectra L.*	Marygold	Sayapatri	Phusano	C	Cere.	Flower
44	Convulvulaceae	*Ipomoea batata (L.) Poir.*	Sweet potato	Shakharkhanda	Hee	C	Fruit	Tuber
45	Cuscutaceae	*Cuscuta reflexa Roxb.*	Dodder	Akas beli	Akas Beli	W	Med.	Whole plant
46	Crassurlaceae	*Kalonchoe spathulate DC*	Elephant ear	Hattikane	Hattikane	W	Med.	Leaf
47	Cruciferae	*Brassica oleracea var. capitata*	Cabbage	Banda	BandaGovi	C	Veg.	Leaves
48	Cruciferae	*Brassica oleracea var. Botrytis L.*	Cauliflower	Cauli	Cauli	C	Veg.	Flower
49	Cruciferae	*Lepidium sp.*	Garden cress	Chamsur	Chamsur	C	Veg.	Shoot
50	Cruciferae	*Persea sps.*	Cauliflower	Kauli	Kauli	C	Veg.	Flower
51	Cruciferae	*Raphanus sativus L.*	Radish	Mula	Kho	C	Veg.	Root

52	Cruciferae	*Nasturium officinalis R. Br.*	Water cress	Khole saag	Khole Saag	W	Veg.	Shoot
53	Cruciferae	*Brassica campestris var. sarryn*	Indian colza	Sarsyu	Muskuron	C	Spice/Oil	Seed
54	Cruciferae	*Brassica juncea L.*	Leaf mustard	Rayo	Pachhai	C	Veg.	Leaves
55	Cruciferae	*Brassica rapa Linn*	Turnip	Salgam	Shalgam	C	Veg.	Root
56	Cruciferae	*Brassica campestris L.*	Indian rapa	Tori	Tu	C	Veg./Oil	Leaves/Seed
57	Cucurbitaceae	*Trichosanthes anguina L.*	Snake gourd	Chichinda	Chichinda	C	Veg.	Fruit
58	Cucurbitaceae	*Trichosanthes dioica Roxb.*	Pointed gourd	Parbal	Dharke Toria	C	Veg.	Fruit
59	Cucurbitaceae	*Sechium edule (Jacq.) SW.*	Chayote	Iskoos	Iskoos	C	Veg.	Fruit
60	Cucurbitaceae	*Leganaria siceraria Standl.*	Bottle gourd	Lauka	Lauka	C	Veg.	Fruit
61	Cucurbitaceae	*Luffa acutangula Roxb.*	Ribbed gourd	Pate ghiraula	Pate Toria	C	Veg.	Fruit
62	Cucurbitaceae	*Cucurbita pepo L.*	Marrow gourd/Pumpkin	Pharsi	Phachhi	C	Veg.	Fruit
63	Cucurbitaceae	*Leganaria siceraria*	Bottle gourd	Lauka	Lauka	C	Veg.	Fruit
64	Cucurbitaceae	*Luffa acutangula Roxb.*	Ribbed gourd	Pate ghiraula	Pate Toria	C	Veg.	Fruit
65	Cucurbitaceae	*Cucurbita pepo L.*	Marrow	Pharsi	Phachhi	C	Veg.	Fruit
66	Cucurbitaceae	*Luffa cylindrical Roem.*	Sponge gourd	Ghiraula	Toria	C	Veg.	Fruit
67	Cucurbitaceae	*Cucumis sativus L.*	Field Cucumber	Kakro	Tushi	C	Fruit	Fruit
68	Cycadecae	*Cycas pectinata Griff.*		Thakal	Thakal	W	Thatch/Fodd.	Leaves
69	Cyperaceae	*Cyperus rotundus L.*	Nut grass	Mothe	Mothe	W	Med.	Tuber

70	Discoreaceae	*Discorea deltoidea Wall.*	Cush cush	Bhyakur	Bhyakur	W	Food /Med.	Root
71	Discoreaceae	*Discorea pentaphylla L.*	Air potato	Chuinya (Bhyakur)	Bhyakur	W	Food /Med.	Root/Tuber
72	Discoreaceae	*Discorea alata L.*	White yam	Ghar tarul	Chheie	C	Food	Root
73	Discoreaceae	*Discorea bulbifera*	Air potato/ Potato Yam	Githa	Githa	C	Veg.	Fruit
74	Discoreaceae	*Discorea bulifera*	Air potato	Gittha	Gittha	W	Food /Med.	Arial tuber
75	Discoreaceae	*Discorea sagittaia Royle.*	Yam	Tarul	Guhi	W	Food	Root
76	Discoreaceae	*Discorea esculenta L.*	Yam	Tarul	Guhi	W	Food	Root
77	Discoreaceae	*Discorea opposditifolia*	Yam	Tarul	Guhi	W	Food	Root
78	Discoreaceae	*Discorea bulbifera L.*	Potato Yam/ Air potato	Ban Tarul	Tarul	W	Veg.	Fruit
79	Ebenaceae	*Diospyros virginia*	Persimon	Haluwabed	Haluwabed	C	Fruit	Fruit
80	Elaeocarpeaceae	*Elaeoocarpus sphaericus Gaertn.*	Utrayum bead	Rudrakshya	Rudrakshya	C	Cere.	Seed
81	Equisetaceae	*Equisetum diffusum Don.*		Aankhijhar	Aankhijhar	W	Med.	Shoot
82	Equisetaceae	*Equisetum debile*		Kukure ghas	Ankhalighas	W	Med.	Leaves
83	Ericaceae	*Galtheria fragrantissima*	Patpate	Dhasingre	Dhasingre	W	Med.	Leaf
84	Ericaceae	*Rhododendron arboretum*	Rhododendron	Gurans	Gurans	W	Cere.	Flower
85	Ericaceae	*Lyonia ovalifolia*	Lyonia	Angeri		W	Fruit	Fruit
86	Euphorbiaceae	*Phyllanthus emblica L.*	Emblic myrobalan	Amala	Amala	W	Med./Fruit	Fruit
87	Euphorbiaceae	*Ricinus communis L.*	Castor plant	Ander	Ander	W	Med./Fruit	Fruit

88	Euphorbiaceae	*Sapium insigne*	Tallow tree	Khirro	Khircha	W	Poison	Milky Latex
89	Euphorbiaceae	*Jatropha curcas L.*	Physic nut	Sajiwan	Sajiwan	W	Med. /Timb.	Bark/Stem
90	Euphorbiaceae	*Manihot esculenta Crantz.*	Cassava	Simal tarul	Simal Tarul	W	Food	Root
91	Euphorbiaceae	*Mallotus philippensis Lam.*	Arg kamala dye	Sindure	Sindure	W	Med. / Timb. / Wood	Fruit/Stem
92	Euphorbiaceae	*Euphorbia pulcherrima*	Poinsettia	Lalupate	Sirau late	W	Cere.	Flower
93	Euphorbiaceae	*Euphorbia royleana Boiss.*	Cn. Milk hedge	Siundi	Sukuma	W	Med.	Latex/Leaf
94	Fagaceae	*Castanopsis indica (Roxb.) A. DC*	Indian chesnut	Dhalne katus	Bhulsima	W	Fruit	Fruit
95	Fagaceae	*Quercus semicarpifolia*	Brown oak	Kharsu	Kharsu	W	Fodd./Wood	Sem/Branches
96	Fagaceae	*Castanopsis tribuloides (Sm.) DC*		Musure katus	Shishma	W	Fuel/wood	Stem/Branches
97	Fagaceae	*Lithocarpus spicata*		Arkaulo		W	Fodd./Med./ Fuel	Leaf/Stem
98	Fagaceae	*Quercus lanata*	Woody oak	Banjh		W	Fodd.	Leaves
99	Fagaceae	*Quercus glauca*	Blue oak	Phalanth		W	Timb./Wood	Bark/stem
100	Gentianaceae	*Swertia angustifolia Buch.-Ham*	Chiretta	Chiraito	Chiraito	W	Med.	Shoot
101	Geraniaceae	*Geranium nepalensis*	Nepalese cransbill	Chunetro ghas		W	Med.	Leaves/Roots
102	Graminae	*Eulaliopsis binata Retz.*	Sabai grass	Babiyo	Babiyo	W	Rope/Thread	Root/Leaves
103	Graminae	*Pennisetum typhoides*	Pearl Millet	Bajra	Bajra	C	Cereal	Grain
104	Graminae	*Triticum sativum L.*	Wheat	Gahu	Chuwa	C	Cereal	Grain
105	Graminae	*Eleusine coracana (L.) Gaertn*	Finger millet	Kodo	Dhusen	C	Cereal	Grain

106	Graminae	*Sorghum vulgare Pers.*	Great millet	Junelo	Junelo	C	Cereal	Grain
107	Graminae	*Vetiveria ziza nioides*	Khus Khus	Kans	Kans	W	Thatch	Leaf
108	Graminae	*Saccharum spontaneum L.*	Thatch grass	Kans	Kans	W	Thatch/Fodd.	Leaves
109	Graminae	*Desmostachya bipinnata (L.) Gaertn*	Kush Kush	Kush	Kush	W	Cere/Fodd.	Leaves
110	Graminae	*Phragmites karka*	Common reed Grass	Narkat	Narkat	W	Fodd.	Leaves
111	Graminae	*Dendrocalamus strictus Roxb.*	Bamboo	Bans	Pura	W	Fibre	Stem
112	Graminae	*Bambusa tudla Roxb.*	Bamboo	Tama bans	Pura	W	Veg.	Young Shoot
113	Graminae	*Bambusa vulgaris Schrad.*	Feathery bamboo	Tama bans	Pura	W	Veg.	Young Shoot
114	Graminae	*Cynodon dactylon (L.) Pers.*	Barmuda grass	Dubo	Sirijha	W	Cere. /Fodd.	Leaves
115	Graminae	*Imperata cylindrical (L.) Beau.*		Siru	Siru	W	Med./Fodd./ Thatch	Leaves
116	Graminae	*Saccharum Officinarum L.*	Sugarcane	Ukhu	Tuma	C	Juice	Stem
117	Graminae	*Thysanolaena maxima Roxb.*	Bouquet grass	Amriso	Tuphen	W	Broom	Floral Shoot
118	Graminae	*Oryza sativa L.*	Rice	Dhan	Ya	C	Cereal	Grain
119	Graminae	*Coix lacrhyma/Jobi*	Job's tears	Bhirkaulo		W	Med.	Seed/Root
120	Graminae	*Zea mays L.*	Maize	Makai		C	Cereal	Grain
121	Haemodoraceae	*Ophiopogan Wallichianus*		Ban Supari		W	Med.	Fruit/Tubers
122	Hyperiaceae	*Hypericum uralum*	Saint John's wart	Khareto	Chhorkiri	W	Broom/Med.	Shoot
123	Juglandaceae	*Hardita spicata*	Engel	Mahuwa	Mahuwa	W	Bedding	Leaves

124	Juglandaceae	*Juglans regia*	Walnut	Okhar	Okhar	C	Fruit/Med.	Seed/Bark
125	Labiatae	*Mentha arvensis*	Peppermint	Pudina	Babar	W	Med.	Leaves
126	Labiatae	*Ocimum basilicum L.*	Common mint	Bawari	Bawari	C	Med.	Leaves
127	Labiatae	*Hyptis sauveolens*	Perilla	Silam	Malicha	C	Spice/food	Seed
128	Labiatae	*Ocimun sanctum L.*	Sacred basil	Tulasi	Tulasi	C	Med.	Leaves
129	Lauraceae	*Cinnamonum tamala Buch.-ham*	Cinnamim leaf	Tejpat	Dalchini	W	Spice	Leaves
130	Lauraceae	*Cinnamonum camphora*	Camphor	Kapur	Kapoor	W	Wood	Stem
131	Lauraceae	*Machilus odoratissima*		Kaulo	Kaulo	W	Fodd./med.	Leaf/Stem
132	Lauraceae	*Listea monopelata*		Kutmero	Kutmero	W	Fodd./wood	Leaves
133	Leguminosae	*Arachis hypogea L.*	Ground nut	Badam	Badam	C	Fruit	Seed
134	Leguminosae	*Vicia faba L.*	Horse beari	Bakulla	Bakula	C	Veg./Pulse	Pod/Seed
135	Leguminosae	*Vigna sinensis Sari.*	Cow pea	Bodi	Bhudi	C	Veg./Pulse	Pod/Seed
136	Leguminosae	*Mimosa pudica L.*	Sensitive plant	Lazzawati	Buharighans	W	Med.	Entire plant
137	Leguminosae	*Cicer arietinum L.*	Gram	Chana	Chana	C	Pulse	Seed
138	Leguminosae	*Pisum sativum L.*	Garden pea	Thulo kerao	Dhaukuraoo	C	Veg./ Pulse	Pod/Seed
139	Leguminosae	*Mucuna pruriens*	Cowhage	Kaunse Simi	Kaunse Simi	W	Veg./Med.	Pod
140	Leguminosae	*Lathyrus sativus L.*	Grass pea	Khesari	Khesari	C	Pulse	Seed
141	Leguminosae	*Bauhinea variegate L.*	Mountain ebony	Koiralo	Koiralo	W	Veg. / Fodd.	Flower

142	Leguminosae	*Dolichos biflorus*	Horse gram	Gahat	Koti	C	Pulse	Seed
143	Leguminosae	*Pisum arvanse L.*	Field pea	Sano kerau	Kuraoo	C	Veg./Pulse	Pod/Seed
144	Leguminosae	*Phaseolus mungo L.*	Black gram	Maas	Maasi	C	Pulse	Seed
145	Leguminosae	*Erythrina stricta*		Mandar	Mandar	W	Fodd.	Leaves
146	Leguminosae	*Glycine max L.*	Soyabean	Bhatmas	Maree	C	Pulse	Seed
147	Leguminosae	*Phaseolus calcaralus Roxb.*	Red bean	Masyang	Masyang	C	Pulse	Seed
148	Leguminosae	*Trigonella foenumgraecum Linn.*	Fenugreek	Methi	Methi	C	Spice	Seed
149	Leguminosae	*Phaseolus aureus Roxb.*	Green gram	Mugi	Mugi	C	Pulse	Seed
150	Leguminosae	*Lens esculenta Moehch.*	Lentil	Masoor	Musu	C	Pulse	Seed
151	Leguminosae	*Albizia julbrissin Durazz*		Padke siris	Padke	W	Fodd.	Leaves
152	Leguminosae	*Bauhinea vehlii Wight and Arn*	Camel climber	Bhorla	Phullati	W	Fodd./Fibre	Leaves
153	Leguminosae	*Cajanus Cajun L.*	Pigeon pea	Rahar	Rahar	C	Pulse	Seed
154	Leguminosae	*Dolichos lablab L.*	Lablab	Simi	Simi	C	Veg./Pulse	Pod/seed
155	Leguminosae	*Bauhinea purpurea L.*	Pink bauhinia	Tanki	Tanki	W	Veg. /Fodd.	Flower/Leaves
156	Leguminosae	*Albizia lebbek*	Black Siris	Kalo Siris		W	Cere.	Flower
157	Liliaceac	*Asparagus recemosus Willd.*	Wild asparagus	Kurilo	Kurilo	W	Med./Veg.	Root/Young shoot
158	Liliaceac	*Paris pollyphyla*		Satuwa		W	Med.	Rhizome
159	Lobeliaceae	*Lobelia pyramidalis*		Eklebir		W	Med.	Leaves/Flower

160	Lofaniaceae	*Buddlua asiatica*	Butterfly bush	Bhimsen pati	Sinasuno	W	Fish poi.	Leaves
161	Lythraceae	*Woodfordia fruticosa L.*	Fire flame bush	Dhayaro	Dhayaro	W	Med./wood	Flower/stem
162	Magnolinaceae	*Michelia kisopa*		Seto champ	Champ	W	Timb.	Stem
163	Malvaceae	*Hibiscus esculentus L.*	Lady's finger	Ramtori	Bhindi	C	Veg.	Fruit
164	Malvaceae	*Hibiscus rosa sinensis*		Ghanti phool	Ghanti Phool	W	Med.	Root
165	Malvaceae	*Gossypium arboreaum*	Cotton	Kapas	Kapas	C	Fibre	Fruit
166	Malvaceae	*Gossypium arboreaim Linn.*	Cotton	Kapash	Kubhya	C	Fibre	Cotton
167	Meliaceae	*Melia azadarach L.*	Persian lilac	Bakaino	Khachhima	W	Fodd./Fuel/wood	Leaves/Branches
168	Menispermaceae	*Cissampelos pareira L.*	Valvet leaf	Batule pate	Batulepate	W	Med.	Root
169	Menispermaceae	*Cissampelos pareira l.*	False pareira	Batulpati	Batulpati	W	Fodd.	Leaves
170	Menispermaceae	*Tinospora cordifolia Willd.*		Gurjo	Gurjo	C	Med.	Stem
171	Moraceae	*Ficus religiosa L.*	Peepal tree	Pipal	Alsima	W	Cere.	Leaves/Whole
172	Moraceae	*Artocarpus lakoocha Roxb.*	Monkey jack	Badahar	Badahar	W	Fodd.	Leaves
173	Moraceae	*Ficus benghalensis L.*	Banyan tree	Bar	Bar	W	Timb.	Stem
174	Moraceae	*Ficus nemorelis*	Milk fig	Dudhilo	Dudhilo	W	Fodd.	Leaves
175	Moraceae	*Ficus recemosa L.*	Cluster fig	Dumre	Dumre	W	Fodd.	Leaves
176	Moraceae	*Ficus lacor Buch.-Ham.*		Kabro	Kabro	W	Fodd./Veg.	Leaves /Flower
177	Moraceae	*Ficus semicordata Buch.-Ham.*	Nepal Fodd. fig	Khanayo	Khanayo	W	Fruit/Fodd.	Fruit/Leaves

178	Moraceae	*Ficus semicordata*	Nepal Fodd. Fig	Raikhanyu	Khanyu	W	Fodd.	Leaves
179	Moraceae	*Morus alba L.*	Black mulbery	Kimbu	Kimbu	W	Fruit / Wood	Fruit
180	Moraceae	*Morus nigra*	Black mulbery	Kimbu	Kimbu	W	Fruit/wood	Fruit/stem
181	Moraceae	*Ficus oriculata*	Moretan-bay fig	Nimaro	Nimaro	W	Fodd.	Leaves
182	Moraceae	*Ficus auriculata Koch./ Laur.*	Aves apron	Timilo	Timila lati	W	Fodd.	Leaves
183	Moraceae	*Ficus hispidia F.*		Khasreto		W	Fodd.	Leaves
184	Moraceae	*Smilax aspara*	Smilax	Kukur Daino		W	Med.	Root
185	Musaceae	*Musa superba Roxb.*	Wild Banana	Ban Maisai	Ban mojin	W	Fruit	Fruit
186	Musaceae	*Musa paradisica l.*	Banana	Maisai	Mojin	C	Fruit	Fruit
187	Myriceceae	*Meliysa velutia*		Kalikath	Bilsima	W	Wood	Branch
188	Myriceceae	*Myrica eculanta*	Bay berry	Kafal	Kusima	W	Fruit/Med.	Fruit/Bark
189	Myrtaceae	*Psidium juajava Linn.*	Guava	Amba	Aamsi	C	Med./Fruit	Fruit
190	Myrtaceae	*Syzygium cumini / Eugenia Jambolana*	Black plum	Jamun	Gochhip	W	Fruit/Timb.	Fruit/Stem
191	Myrtaceae	*Syzygium serasiodes L.*		Kyamuna	Kyamuna	W	Fruit	Fruit
192	Myrtaceae	*Syzygium guajava Linn.*	Clove	Lwang	Lwang	C	Spice	Flower
193	Myrtaceae	*Eucalyptus citriodora*	Lemon Scented Eucalyptus	Masala		W	Wood	Branches
194	Nymphaecae	*Nelimbium mucifera*	Indian Lotus	Kamal	Fushima	W	Cere.	Flower
195	Oleaceae	*Jasminum multiflorum*	Winter jasmine	Beli	Beli	C	Cere.	Flower

196	Oleaceae	*Jasminum arborescens Roxb.*	Tree jasmine	Chameli	Chameli	C	Med.	Flower
197	Oleaceae	*Ligustrum confusum*	privet	Kanike phool	Kanike phool	W	Cere.	Flower
198	Oleaceae	*Nyactanthes arbortristis L.*	Coral jasmine	Parijat	Parijat	C	Cere.	Flower
199	Oleaceae	*Pogostemon glaber*		Rudhilo	Rudhilo	W	Fodd./Med	Leaves
200	Oleaceae	*Fraxinus floribunda*		Lankuri	Tusiglima	W	Fodd.	Leaves
201	Ophioglossaceae	*Ophioglossum nudicaula L.*		Zibre saag		W	Veg.	Frond
202	Ophioglossaceae	*Ophioglossum petiolatum L.*		Zibre saag		W	Veg.	Leaves
203	Ophioglossaceae	*Ophioglossum reticulatum Hook.*		Zibre saag		W	Veg.	Leaves
204	Orchidaceae	*Oxalis corniculata L.*	Creeping sorrel	Chari amilo	Porkhojhan	W	Med.	Leaves/ Fruit
205	Orchidaceae	*Rhynchosystylis relusa*	Orchid	Ghoghegava		W	Veg.	Shoot
206	Orchidaceae	*Cureoligo orchioidies*		Kalo Musali		W	Med.	Leaves
207	Pedaliaceae	*Guizotia Abyssinia*		Jhuseteel	Juse teel	C	Spice	Seed
208	Pinaceae	*Abies spectabilis*	Fir	Gobresalla	Degma	W	Wood	Stem
209	Pinaceae	*Pinus roxburghii*	Chir pine	salla	Salla	W	Timber	Whole plant
210	Pinaceae	*Cedrus deodara*	Himalayan cedar	Deodar		W	Timb.	Stem
211	Piperaceae	*Piper nigrum L.*	Black peeper	Marich	Maregu	C	Spice	Fruit
212	Ploypodiaceae	*Dryioptris filix*	Fern	Uniu	Uniu	W	Veg.	Shoot
213	Polygonaceae	*Fagopyrum esculentum*	Sweet buck wheat	Mithe phapar	Phapar	C	Cereal	Grain

214	Polygonaceae	*Fagopyrum tataricum Geartn.*	Tatary buck wheat	Tite Phapar	Phapar	C	Cereal	Grain
215	Punicaceae	*Punica gromatum L.*	Pomegranate	Anar	Dhachipan	C	Fruit/Med.	Fruit
216	Ranunculaceae	*Thalictrum foliolosum*	Meadow rue	Dampate		W	Med.	Roots
217	Rhamnaceae	*Zizyphus incurva*	Bead Plum	Hade Bayar	Hade bayar	W	Fodd./Fruit/bio-fenc.	Leaves/Fruit
218	Rosaceae	*Prunus domestica L. var. instiata*	Plum	Aalubokhara	Aalcha	C	Fruit	Fruit
219	Rosaceae	*Prunus persica Stokes.*	Peach	Aaru	Besi	C	Fruit	Fruit
220	Rosaceae	*Pyrus pashia Buch.-Ham.*	Wild pear	Mayal	Gupasi	W	Fruit	Fruit
221	Rosaceae	*Eriobotrya dubia*	Medlar	Jure Kaphal	Jure Kaphal	W	Fruit	Fruit
222	Rosaceae	*Pyrus communis L.*	Common pear	Naspati	Pasi	C	Fruit	Fruit
223	Rosaceae	*Rubus ellipticus Smith.*	Golden raspberry	Aiselu	Phachhipoun	W	Fruit/bio-fencing	Fruit
224	Rosaceae	*Rubus foliolosus*	Raspberry	Kalo Ainselu	Phachhipoun	C	Cere.	Flower
225	Rosaceae	*Rubus paniculatus*	Raspberry	Rookh Ainselu	Phachhipoun	W	Fruit	Fruit
226	Rosaceae	*Prunus ceresoides*	Cherry	Paiyun	Phusima	W	Fodd.	Leaves
227	Rosaceae	*Rosa microphylla*	Edward Rose	Jungali Gulab	Phusuno	W	Bio-fencing	Whole plant
228	Rosaceae	*Prunus Domestica*	Peach	Aalubokhra		C	Fruit	Fruit
229	Rosaceae	*Pyracantha crenulata*	Fire thorn	Ghangaru		W	Bio-fencing	Whole plant
230	Rubiaceae	*Luculia gratissima*		Ban Kangio	Ban kangio	W	Wood	Branches
231	Rubiaceae	*Xeromorpis spinosa Thunb.*	Cn. Emetic nut	Maidal		W	Fish poison	Fruit/Thorn

232	Rubiaceae	*Rubia manjith*	Indian madder	Majitho		W	Med.	Root/Fruit
233	Rutaceae	*Citrus maxima L.*	Pummelo	Bhogate	Bhogate	C	Fruit	Fruit
234	Rutaceae	*Citrus jambhire L.*	Rough lemon	Jyamir	Jhwampa	C	Fruit	Fruit
235	Rutaceae	*Citrus aurantifolia Swing.*	Lime	Kagati	Kagati	C	Fruit	Fruit
236	Rutaceae	*Citrus limon Burm.*	Lemon	Nibuwa	Lhimshi	C	Fruit	Fruit
237	Rutaceae	*Citrus reticulate Blanco*	Orange	Suntala	Suntala	W	Fruit	Fruit
238	Rutaceae	*Xanthoxylum armetum / alatum*	Prickly ash	Timur	Timur	W	Pickle/bio-fencing	Fruit
239	Rutaceae	*Citrus medica L.*	Citron	Bimiro	Tushipon	C	Fruit	Fruit
240	Salicaceae	*Salix sps.*	Nepolians willow	Bains	Bains	W	Cere./Fuel	Flower / stem
241	Santalaceae	*Osyris wightiana*		Nun dhiki	Nundhiki	W	Tea	Leaves
242	Sapindaceae	*Nephelium litchi camp.*		Litchi	Litchi	C	Fruit	Fruit
243	Sapindaceae	*Schleichra oleosa (Lour.) Oken*	Soap nut	Ritha	Ritha	W	Med.	Fruit
244	Sapindaceae	*Schleichra oleosa (Lour.) Oken*	Lac tree	Kusum		W	Fruit	Fruit
245	Sapindaceae	*Acer oblongum*		Phirphire ghans		W	Fodd.	Branches
246	Saurauriacae	*Saurauia nepaulensis*		Gogan	Gogan	W	Fodd.	LEaves
247	Saxifragaceae	*Bergenia ciliate Haw.*	Rock foil	Pakhambed	Pakhambed	W	Med.	Rhizome
248	Scrophulariaceae	*Digitalis thapsi*	Fox globe			W	Med.	Leaf/Bark
249	Smileaceae	*Smilax aspara L.*	Green briers	Kukur daino	Kukur daino	W	Veg./Med.	Shoot/Root

250	Solanaceae	*Solanum tuberosum L.*	Potato	Aaloo	Aaloo	C	Veg.	Fruit
251	Solanaceae	*Nicotiana rustica L.*	Tobacco	Surti	Bajaun Lati	C	Smoke	Leaves
252	Solanaceae	*Solanum melongena L.*	Egg plant/Brinjal	Bhanta	Bhanta	C	Veg.	Fruit
253	Solanaceae	*Capsicum frutescens L.*	Bell peeper	Bhende khursani	Bhenden Khoshni	C	Veg.	Fruit
254	Solanaceae	*Solanum anguivi Lam.*	Cherry shrub	Bihi	Bihi	W	Med.	Fruit/Root
255	Solanaceae	*Datura medel L.*	Timsen weed	Dhatura	Dhatura	W	Intox. / Med.	Seed
256	Solanaceae	*Solanum xanthocarpum Schrad.*	Yellow berried night shade	Kantakari	Kantakari	W	Med.	Fruit
257	Solanaceae	*Capsicum microcarpum DC*	Birdseye chilly	Jire khursani	Khoshni	C	Spice	Fruit
258	Solanaceae	*Lycopersicum esculentum Mill.*	Tomato	Golbhenda	Kobhra	C	Veg.	Fruit
259	Sterculiaceae	*Sterculia villosa Roxb.*	Sterculia	Odal	Odal	W	Fibre / Fodd.	Leaves/Stem
260	Theaceae	*Schima wallichi (DC) Korth.*	Needle wood	Chilaune	Chasima	W	Timb.	Stem
261	Theaceae	*Thea sinensis L.*	Tea	Chiya	Chiya	C	Drink	Leaves
262	Theaceae	*Cleyera ochnaceae*		Bakle pat	Hubinsima	W	Fodd.	Leaves
263	Thymelacaceae	*Daphne bholua*		Kagati pate		W	Med.	Whole Plant
264	Ulmaceae	*Celtis australis*	European nettlewood	Khari	Kushima	W	Fodd./Wood	Stem/Leaves
265	Umbelliferae	*Coriandrum sativum L.*	Coriander	Dhaniya	Dhanyouncha	C	Spice	Shoot/Fruit
266	Umbelliferae	*Trachyspermum ammi L.*	Lovage	Jwano	Emo	C	Spice/Med.	Fruit
267	Umbelliferae	*Daucus carota L.*	Carrot	Ganjar	Ganjar	C	Veg.	Root

268	Umbelliferae	*Cantella asiatica (L.) Urban.*	Water penny wort	Ghodtapre	Ghodtapre	W	Med.	Leaves
269	Umbelliferae	*Myristica fragrans*	Nutmeg	Jaiphal	Jeephan	C	Spice	Nut
270	Umbelliferae	*Cuminum cyminum L.*	Cumin seed	Jeera	Jeera	C	Spice	Fruit
271	Umbelliferae	*Anethum graveolens L.*	Dill	Shonp	Shonp	C	Veg./Spice	Shoot/Fruit
272	Urticaceae	*Utrica ardens L.*	Stinging nettle	Sisnu	Nhaangi	W	Veg.	Leaves
273	Urticaceae	*Utrica dioica L.*	Stinging nettle	Sisnu	Nhaangi	W	Veg.	Leaves
274	Urticaceae	*Conostegia hirta*		Mas Lahara		W	Med.	Fruit
275	Valerianaceae	*Valeriana Jatamasi*	Common valerian	Sugandhwal		W	Med.	Whole plant
276	Verbenaceae	*Clerodendrum Viscosum Vent.*	Turk's turban	Bhenta	Baigan	W	Fodd.	Leaves
277	Verbenaceae	*Callicarpa macrophylla*		Gunyalo	Gunyalo	W	Med./Fodd.	Flower/Fruit/ Leaves
278	Verbenaceae	*Duranta repens*	Pigeon berry	Nilkanda	Nilkanda	W	Bio-fencing	Whole Plant
279	Verbenaceae	*Vitex negundo L.*		Simali	Simali	W	Med.	Leaves
280	Vitaceae	*Vitis vinifera L.*	Grapes	Angoor	Angoor	C	Fruit	Fruit
281	Zingiberaceae	*Curcuma angustifolia Roxb.*	Turmeric	Herdi	Hile	C	Spice/Med.	Rhizome
282	Zingiberaceae	*Zingiber officinale Rosc.*	Ginger	Aduwa	Palo	C	Spice	Rhizome
283	Zingiberaceae	*Hedichium spicatum*	Spiked ginger lily	Pankha Phool		C	Cere.	Flower
284	Zingiberaceae	*Hedichium spp.*	Hedychium			W	Med.	Roots

Table 34: Medicinal Animals Practised as per diseases or clinical conditions

S. N.	Diseases or Clinical Conditions	Animal Species
1	Bone Fracture	*1) Anadenus sp. 2) Canis aureus 3) Araneae sp.*
2	Asthma	*1) Lepus indica*
3	Malaria	*1) Pheretima sp.*
4	Tuberculosis	*1) Anadenus sp. 2) Canis aureus*
5	Unconsciousness	*1) Melursus ursinus*
6	Arthritis and rheumatism	*1) Canis aureus 2) Felis chaus*
7	Blood and heart related diseases	*1) Pteroposus sps.*

Table 35: Animals of medicinal importance to the Pahari

S. N.	Animal Species/ Ethnic name	Order	Family	Medicinal Use
1	*Anadenus sp.*/Bob	Stylomatophora (Mollusk)	Helicidae	Meat is considered to be useful in tuberculosis and bone fracture.
2	*Araneae sp.*/Makura	Arania	Araneae	The animal is given to fowls in bone fracture.
3	*Canis aureus* (L.)/Syal	Carnivora	Canidae	Boiled meat is used on tuberculosis, rheumatism.
4	*Melursus ursinus* / Bhalu	Carnivora	Felidae	Bile is used in unconsciousness.
5	*Felis chaus* /Ban Biralo	Carnivora	Felidae	Meat is used in rheumatism and arthritis.
6	*Lepus indica*/Dumsi	Rodentia	Leproidae	Meat is used in asthma.
7	*Pteroposus sps.*	Chiroptera	Pteropodidae	Meat is used in blood and heart related diseases.
8	*Pheretima sp./Gadyaula*	Oligochaetes	Megoscolecidae	Flesh is used in malaria.

Table 36: Medicinal plants practiced as per diseases or clinical condition

S. N.	Diseases or Medical Conditions	Plant species used
1	Anorexia (inappetite)	*1) Artemesia vulgaris 2) Cantella asiatica*
2	Biliousness	*1) Cuscuta reflexa*
3	Chest Pain	*1) Cucurma angustifolia 2) Crataeva unilocularis 3) Desmodium heterocarpus*
4	Constipation	*1)Discorea deltoidea 2)D. bulbifera 3) D. pentaphylla 4) Phyllanthus emblica 5) Spinaceae oleraceae 6) cureoligo orchiodies 7) Machilus odoratissima*
5	Cough, cold, influenza and Sinus	*1) Drymaria diandara 2)Eupatorium adenophorum 3) Ocimum basilicum 4)O. sanctum 5) Solanum anguivi 6) Ophiopogon wallichianus 7) Curcuma angustifolia Roxb. 8) Ageratum conyzoides*
6	Cuts and wounds (Haemostatic / Antiseptic/Astringent)	*1) Adina cordifolia 2)Ageratum conyzoides 3)Eupatorium adenophorum 4)Jatropha curcas 5)Kakanchoe sapthulate 6) Rubia cordifolia 7) Polypodium vulgare 8) Galtheria fragrantissima*
7	Diabetes	*1) Allium Wallichi*
8	Diarrhea / Dysentery / Cholera	*1) Artemesia vulgaris 2 Cannabis sativa 3) Cyperus rotundus 4)Discorea bulbifera 5) D. deltoidea 6) D. pentaphylla 7) Equisetum diffusum 8) Punica gromatum 9) Rhus javanica 10) Terminalia alata 11)T. chebula 12)Tinospora cordifolia 13) Woodfordia fruticosa 14) Ageratum conyzoides 15) Conostegia hirta 16) Bergenia ciliate Haw. 17) Psidium guajava 18) Valeriana jatamasi 19) Equisetum debile 20) Lithocarpus spicata*
9	Eye problem	*1) Barberis aristata 2) Oxalis corniculata*
10	Gout, Rheumatism, Arthritis, Pain	*1) Cannabis sativa 2) Costus speciosus 3) Cuscusta reflexa 4) Desmodium heterocarpus 5) Ocimum basilicum 6)Ricinus communis 7) Semecarpus anacardium 8) Solanum xanthocarpum 9) Terminalia chebula 10) Conostegia hirta 11) Myrica esculenta*
11	Fever (Antipyretic)	*1) Hibiscus rosa sinensis 2)Solanum xanthocarpum 3) Swertia angustifolia 4) Myrica esculenta*
12	Gastritis	*1) Cantella Asiatica 2) Wrightia arborea 3) Mentha spicata L.*
13	Headache	*1) Solanum anguivi 2) Swertia angustifolia*
14	Heart Trouble / Hypertension	*1) Swertia angustifolia 2) Valeriana officinalis*

15	Helminthiasis (Antihelmintic)	*1) Artemesia vulgaris 2) Discorea deltoidea 3) Imperata cylindrical 4) D. pentaphylla 5) Punica gromatum 6) Semecarous anacardium 7) Paris pollyphyla*
16	Indigestion	*1) Cantella asiatica*
17	Jaundice (Liver problem)	*1) Cuscuta reflexa 2) cureoligo orchiodies*
18	Lactation	*1) Asparagus racemosus*
19	Lumbago	*1) Costus speciosus*
20	Malaria	*1) Jatropha curcus*
21	Mouth ulcer and rashes	*1) Callicarpa arborea 2)Borage officinalis*
22	Peptic Ulcer	*1)Discorea bulbifera 2) Hypericum uralum*
23	Skin Problems (Boils, Blisters, Eczema, Itching, Ringworm, Scabies)	*1)Artemesia vulgaris 2) Butea monosperma 3) Callicarpa arborea 4) Jatropha curcas 5) Mimosa pudica*
24	Snake bite and Scorpion sting	*1) Mimosa pudica 2) Glycorrhiza glabbera 3) Lobelia pyramidalis*
25	Stomach and / or Abdominal Troubles/Colic / "Gano-gola Sareko"	*1) Achyrenthes aspera 2) Artemesia vulgaris 3) Bombax ceiba 4) Cantella asiatica 5) Woodfordia fruticosa 6) Phyllanthus emblica 7) Semeca rpus anacardium 8) Terminalia alata 9) T. bellerica 10) Terminalia chebula 11) Bergenia ciliate Haw. 10) Cissampelos pareira L.*
26	Throat troubles (Sore throat, Laryngitis, Pharyngytis, Asthma, Bronchial catarrh)	*1) Acorus calamus 2) Artemesia vulgaris 3) Centella asiatica 4) jasmimum arborescens Roxb. 5)Scorpia dulcis L. 5) Thalictrum foliolosum 6) cureoligo orchiodies*
27	Tonic	*1) Asparagus recemosus 2) Coix lacrhyma-Jobi. 3) Paris pollyphyla*
28	Tooth Problems, Dental caries, Swollen gums	*1) Artemesia vulgaris 2) Jatropha curcas 3) Solanum xanthocarpum 3) Euphorbia royleana Boiss.*
29	Typhoid	*1) Saussurea gossypiphora 2)Maltos phillipensis 3) Geranium nepalensis*
30	Urinary Troubles and Calculus	*1) Cantella asiatica 2) Solanum xanthocarpum 3) Woodfordia fruticosa*
31	Conjunctivitis	*1)Mohania nepalensis 2) Solanum xanthocarpum*

Table 37: Plant species of medicinal importance to Pahari

S. N.	Plant Species	Family	Medicinal Use
1	*Achyrenthes aspera L./* Ultejhar	Amaranthaeceae	Root juice is used as diuretic. Leaves juice is used in stomach trouble.
2	*Acorus calamus L./*Bojho	Araceae	Rhizome is helpful in sore throat or bronchial catarrh.
3	*Allium Wallichi /* Ban lasun	Amaryllidaceae	Diabetes, cough, cold, to avoid altitude sickness.
4	*Rubia Cordifolia /* Majitho	Rubiaceae	Root tonic, alterative, astringent, useful in paralysis, ulcer, skin diseases, dying.
5	*Ageratum conyzoides L. /*Raunne	Asteraceae	Plant juice is used as haemostatic and antiseptic in cuts and wounds.
6	*Borago officinalis*	Boraginaceae	Diuretic, sedative, Mouth and throat infection, antidepressant/BP.
7	*Hedychium spp./* Herdi	Zinziberaceae	Root decoction is used to treat earache.
8	*Artemesia vulgaris L. /* Titepati	Compositae	Plant juice is taken as antihelmintic, ant dysenteric, stomachic and also used to treat anorexia, asthma and toothache. Plant juice is used to cure itching and scabies.
9	*Coix lacrhyma-Jobi/* Bhirkaulo	Graminae	Seeds: tonic, diuretic and blood purifier.
10	*Conostegia hirta /* Mas lahara	Urtiaceae	Roots used in MC disorder and bone fracture, arthritis, diarrhea, lungs etc.
11	*Asparagus racemosus Willd./* Kurilo	Liliaceae	Tender shoot is used as tonic for convalescing patients and post-natal mother. Root tuber decoction is given to mothers and cattle to enhance lactation (as galactogogue).
12	*Bergenia ciliate Haw. /* Pakhambed	Saxifragaceae	Rhizome paste is used as antipyretic (to reduce fever) and diuretic. It is helpful in dysentery and stomach troubles.
13	*Bombax ceiba L./ Simal*	Bombacaceae	Flower is helpful in dysentery and stomach troubles.

14	*Butea monosperma Lam./* Palans	Leguminosae	Seed paste is used as poultice in swellings and boils to ease pain, irritation and hasten the expression of pus.
15	*Callicarpa arborea Roxb./* Gunyalo	Verbenaceae	Flowers and fruits are used to cure mouth ulcer, rashes on tongue, boils and blisters on hands and legs.
16	*Daphne bholua*	Thymelacaceae	Purgative, febrifuge, bitter
17	*Cannabis sativa Linn/* Gaanja/ Bhang	Cannabinaceae	Smoke of dried leaves is anodyne and sedative, also antidiarrheal, antidysenteric and anticholeral.
18	*Cantella asiatica (L.) Urban./* Ghodtapre	Umbelliferae	Plant juice is used in liver and gastric troubles, indigestion and as appetizer and diuretic. It is also in throat trouble.
19	*Geranium nepalensis*	Geraniaceae	Typhoid
20	*Glycyrrhiza glabbera*	Leguminosae	Tonic laxative, demulcent, emollient, urino genital disorder, coughs, sore throat & scorpion sting.
21	*Cissampelos pareira L./* Batule pate	Menispermaceae	Root juice is used as diuretic and in colic and "gano-gola sareko".
22	*Costus speciosus Koenig./* Betlauri	Zingiberaceae	Rhizome is considered to be a blood purifier and also used to relieve congestion and chest and abdominal distension.
23	*Crataeva unilocularis Buch.-Ham.*/ Sipligan	Capparaceae	Leaves decoction is diuretic and useful in calculus affection and other urinary infections. Leaves are also helpful in headache, heartache, and chest pain.
24	*Curcuma angustifolia Roxb.*/ Herdi	Zingiberaceae	Rhizome is considered to be a blood purifier and also used to relieve congestion and chest and abdominal distension.
25	*Cuscuta reflexa Roxb.* /Akas beli	Cuscutaceae	Plant juice is used to treat jaundice, rheumatism, and bilious disorders.
26	*Desmodium heteroca-rpus /*Gahate jhar	Fagaceae	Leaves and root decoctions are used to treat rheumatism, arthritis, chest pain and other internal pains.
27	*Discorea bulbifera /*Gittha	Discoreaceae	Stem tuber is useful in constipation, dysentery, and ulcer and as refrigerant.

28	*Discorea Deltoidea/* Bhyakur	Discoreaceae	Root tuber is useful in constipation, dysentery, and expelling worms from the intestine.
29	*Discorea pentaphylla L./* Jyarpas	Discoreaceae	Stem tuber is useful in constipation, dysentery, and expelling worms from the intestine.
30	*Drymaria diandara BL* / Pinase Jhar	Chenopodiaceae	Plant is heated in a cloth and smelt to treat cold and sinus problem.
31	*Eupatorium adenoph-orum* Spreng / Banmara	Compositae	Meshed Leaves is smelt to cure cough and cold. Leaves juice is used on cut and wounds.
32	*Euphorbia royleana Boiss.* / Siundi	Euphorbiaceae	Latex is useful in muscular swelling, sprain and dental caries.
33	*Hibiscus rosa sinensis /* Ghanti Phool	Malvaceae	Root decoction is antihelmintic, antidysenteric and antidiarrheal
34	*Imperata cylindraca (L.) Beau./*Siru	Graminae	Root paste is used as antihelmintic to expel worms from intestine.
35	*Jasmimum arborescens Roxb./*Chameli	Oleacea	Flower is used in throat problem.
36	*Jatropha curcas L.* / Sajiwan	Euphorbiceae	Latex is used to treat scabies, boils, eczema, ringworm, swollen gums, toothache and also cuts and wounds. Twigs are used as toothbrush. Fruit decoction is used to treat malaria and rheumatic pain
37	*Kankanchoe spathulate DC/* Hattikane	Crassurlaceae	Stem juice is used as astringent, in cuts and wounds.
38	*Mentha spicata L. /Pudina*	Labiatae	Leaves decoction is used to treat acidity and gastritis. It is carminative. Leaves decoction is also used as refrigerant.
39	*Malltos phillippensis Lam.* / Sindure	Euphorbiceae	Fruit and bark decoction are used to treat typhoid, dysentery, and diarrhea and also as antihelmintic and purgative.
40	*Mimosa pudica L.* / Lazzawati	Leguminosae	Root paste is used to draw out pus from wounds. Leaves and root pastes are also used in snakebite and scorpion sting.

41	*Ocimum vasolocum L.* /Tulasi	Labiatae	Leaves are used to treat cold and cough. They are also helpful in rheumatism and internal pains.
42	*Oxalis conriculata L.* / Chari amilo	Oxalidaceae	Plant juice is used in cuts, wounds, boils, nosebleed, and eye inflammation. It is considered haemostatic and antiseptic.
43	*Phyllanthis enmblica L.* / Amala	Euphorbiaceae	Fruit is used as diuretic, laxative, and stomachic.
44	*Polypodium vulgare* / Bishphej	Polypodiaceae	Plant juice is used in cut and wounds.
45	*Psiduim guajava* Linn. / Amba	Myrtaceae	Bark decoction is used as antidysenteric.
46	*Punica gromatum L.* / Anar	Punicaeae	Rind of fruit is antidiarrheal, antidysenteric and vermifuge (expel tapeworm).
47	*Rhus javanica L.* / Bhaki Amilo	Anacardiaceae	Ripe fruit Leaves or root powder is taken as antidiarrheal and antidysenteric.
48	*Ricinus communis L.* / Ater	Euphorbiceae	Fruit is used in treatment of rheumatism, arthritis, and glandular tumors.
49	*Saussurea gossypiphora D. Don* / Kapase phool	Astecaceae	Root decoction is antipyretic and used to treat typhoid.
50	*Scorpia dulcis L.*/ Chinijhar	Scrophulareaceae	Leaves and root juices are used in throat trouble.
51	*Semecarpus anarcardium L.* / Bhalayo	Anarcadiaceae	Fruit is taken as antihelmintic, stomachic and in fever, rheumatism, and arthritis.
52	*Solanum anguivi Lam./* Bihi		Fruit paste is used on forehead to treat headache. Root is useful in cough, cold, and fever.
53	*Solanum xanthocaroum Schrad.* / Kantakari	Solanaceae	Fruit is antipyretic, analgesic (pain relieving) and diuretic, and also helpful in throat trouble.
54	*Terminalia chebula Retz./* Harro	Combreraceae	Fruit is analgesic (pain relieving), stomachic, digestive, antidysenteric and helpful in colic and chest pain.

55	*Tinospora cordifolia Willd.* / Gurjo	Menispermaceae	Stem pieces are soaked in water and taken to treat colic, diarrhea, dysentery and various abdominal and urinary troubles. Root powder is given to cattles as tonic. Stem is useful is cyst infections in cattles.
56	*Woodfordia fruticosa L.* / Dhayaro	Lythraceae	Flower is used as astringent, haemostatic and useful in dysentery, menorrhagia and stomach and urinary troubles.
57	*Wrightia arborea D.* / Khirro	Apocynaceae	Bark decoction / powder is taken 1-2 teaspoonfuls a day to cure gastristis.
58	*Lobelia pyramidalis/* Eklebir	Lobeliaceae	Antimasmodic, poisonous.
59	*Ophiopogan wallichianus/* Ban Supari	Haemodoraceae	Dry coughs, fever, insomnia, anxiety.
60	*Datura stramonium* / Dhaturo	Solanaceae	Daturine, narcotic.
61	*Hedera nepalensis/* Dudhelo	Araliaceae	Stimulant, diaphoretic, cathartic.
62	*Digitalis thapsi /*	Scrophulariaceae	Nausea, vomiting, slow pulse, fainting.
63	*Thalictrum foliolosum /*Dampate	Ranunculaceae	Tonic, aperient, purgative, diuretic, febrifuge, opthalmetic.
64	*Paris pollyphyla /* Satuwa	Liliaceae	Antihelmintic, vermifuse, tonic.
65	*Valeriana Jatamasi/* Jatamasi	Valerianaceae	Stimulant, carminative, epilepsy, antispasmodic, hysteria, cholera, neurosis etc.
66	*Spinacea Oleraceae L./* Spinach	Chenopodiaceae	Cure anaemia and constipation.
67	*Juglans regia*/ Okhar	Juglandaceae	Cure hairfall.
68	*Curcuma angustifolia Roxb./* Jwano	Umbelliferae	Cold, fatigue and energetic.
69	*Ageratum conyzoies*/ Namchejhar	Compositae	Common cold, fever.
70	*Berberis aristata* /Chutro	Berberidaceae	Malaria, Skin problems and conjuctivitis.
71	*Solanum xanthocarpum /* Chiraito	Gentinaceae	Conjunctivitis.
72	*Cureoligo orchiodies*/ Kalo musali	Orchidaceae	Jaundice, constipation, asthma etc.

73	*Cyperus rotundus/* Mothe	Cyperaceae	Diarrhea and stomachache.
74	*Equisetum diffusum* / Ankhijhar	Equisetaceae	Stomach troubles and dysentery.
75	*Equisetum debile* / Kukure ghas	Equisetaceae	Dysentery and vomiting.
76	*Galtheria fragrantissima/* Dhasingre	Ericaceae	Cuts and wounds.
77	*Hypericum uralum/* Khareto	Hypericeae	Peptic problems
78	*Lithocarpus spicata* / Arkaulo	Fagaceae	Antidysenteric and diuretic
79	*Machilus odoratissima/* Kaulo	Lauraceae	Constipation
80	*Myrica esculanta/ Kafal*	Myricaceae	Respiratory problem, fever and arthritis

Annex 3:

PHOTOGRAPHS

Fig. 1: Different bamboo craft items made by Pahari

Fig. 2: Pahari woman in bamboo craft activity (researcher behind)

Fig. 3: Interview being taken (in open place)

Fig. 4: Interview being taken (at home)

Fig. 5: Key informant for in-depth interview

Fig. 6: Note-taking of traditional craft activity

Fig. 7: Taking household interview

Fig. 8: Data collection from local Health Post

Fig. 9: Data collection from district forest office

Fig. 10: Data collection from VDC office, Badikhel

Fig. 11: Photo showing study area

Fig. 12: Photo showing study area (close view)