# Socio-Cultural and Ethno-botanical knowledge of Aidy: An Anthropological Study of Mimi VDC OF Humla

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# 1. Introduction

Nepal is one of the smallest countries in the world in its geographical area. It is the richest country in ethnic, socio-cultural, altitudinal, climatic, ecosystem and floristic diversity. The dominancy of an agrarian society of rural people is directly based on plant resources and have their own customary, traditional technology and knowledge concerning their cultural response to the plant world. The socio-cultural, economic and religious practices of the ethnic groups are in one way or other linked to the plants and plants products. So, in Nepal there is remarkable ethnic biodiversity and wealth of indigenous knowledge of plants with economic value. The interrelationship and interdependency between the human being and the plant world is closely associated with the emergence of human race, human culture and their successive evolution.

Indigenous knowledge is the accumulated knowledge, skills and technology of people, derived from the direct interaction of human beings and their environment. Indigenous knowledge is initiated, derived and evolved by the local people themselves. Native people have a stock of indigenous knowledge and experience, traditional technology, skill and innovation which have been helping them to survive in the hostile environment. Indigenous knowledge is initiated and developed by the local people for the survival of their communities and culture. It is the sum of experiences and knowledge of Aidy that forms the basis for decision making in the face of familiar and unfamiliar problems and challenges.

Nepal is a land of ancient culture and is divided into two regions i.e. the hill culture and the plain culture. It has been a model of mosaic society with over forty mutually unintelligible groups and further divisions by caste. It has wealth of culture of cultural diversity. This cultural mosaic structure, which gives ethnic identification. People of such ethnic groups of every region have their own traditions, culture and various ways of life.

Ethno-science is the sum total of group's knowledge, conceptions and classification of objects, activities and events. Its social and material world is the sum total of the "reduction of chaos" achieved by a particular culture. Ethno-botany is the study of plants used by native community. It is a multidisciplinary approach blending the method and information from both anthropology and botany. Ethno-botany, ethno-ecology etc are the fields of cognitive anthropology which emphasized the perceptual environment of a particular culture. The term ethno-botany was adopted by anthropologists at the end of the last century and the focus has changed to the native's point of view and his rules and categories for ordering the universe. Within that context ethno-botany was recognized as the study of plants in their relation to human culture.

Some ethno-botanical investigation of the Nepalese communities has been carried out by the biological and social scientists. Most of them have ignored the socio-cultural dimension of ethnobotany. Department of plant resource published a document of medicinal plants of Nepal in 1970 and 1997 which provides information of 571 medicinal plant species, their traditional uses, habitat and distribution. Malla and Shakya (1984) reported 630 species of medicinal plants in

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Nepal. Sapkota, Sarkar, Shakya and Shrestha (1994) reported 48 Spp. of medicinal plants. Shrestha (1985) documented 83 Spp. which are used in medicine, poison; edible fodder, green manure. Bhandari and Shrestha documented 67 Spp. of the poisonous plants. Manandhar (1982) reported 102 Spp. useful wild plant of Nepal. Sapkota (2000, 2003) documented 91, 46 medicinal plants in different part of the country. Similar work was carried out by various workers. They reflect the plant-people relation in native community with their culture but the effort of summarization, planning and conservation of their identity is not started till now.

# 2. The People

Aidy are settled in Mekhala Village. Mekhala is located in Mimi village development committee of Humla district in Karnali zone. They are innocent, shy and relatively timid people having normal height, mangolian face and slightly black in colour and facing serious crisis in their sociocultural. Aidy is one of the most marginalized ethnic group, who have not been studied from anthropological perspective till now. There was not any authentic written documents about the origin of the Aidy people though, questioned with some elders Aidys, they were descendent from the Thapele in the ancient time and migrated from Darchula district and live in this area. Due to good skill to catch deer they were called Aidy and no anthropologists of Nepal have studied about this ethnic group and not written document about the origin of them. They have a stock of indigenous knowledge, traditional system of organization and customary concerning the use and management of plant resources, which could bring valuable information about the using pattern, conservation and management before it is lost. For the biodiversity conservation, sustainable local level development, socio-cultural identity and fine -tuning, they respond the current challenges that will benefit not only them but also the forthcoming researchers. It also helps preserve their culture as well as their knowledge about people-plant relationship. Similarly, policy and program makers can be benefited to formulate most appropriate strategies for development and welfare of the entire humanity. Mekhala is the south-east flank of Bhadikharka hill and it is about four days far on foot from Simikot, headquarter of Humla. The Mekhala village lies in 2450 meter height from the sea level. Topographically it lies on the mid hill of Nepal and is in Mahabharat range, which is a fold mountain. It is made up of little differentiated, metamorphosed, sedimentary and igneous rocks of various ages. This village is divided into two wards having 33 households. Among them 32 households of Aidy's and one is of Lohar. The total population of Aidy is 330 which is more than 80% population of the Mimi VDC, (Field survey 2001). In an average, there are ten members in a family of Aidy community. The forest and the terraced land is interrupted by the naked hill with gravel, coarse (rough) rocky soil and unproductive land. The terraced land is narrow, slopped and does not posses big streams and springs for irrigation. This area is not suitable for rice cultivation in the sense of irrigation and topography. The climate is cool temperate and alpine. It receives an average annual precipitation of 1000-1500 mm, with a high rainfall in July to August and snowfall in January to February. The area above 4000 m elevation remains covered by snow more than six months of the year.

# 3. Materials and Methods

The indigenous knowledge that we see today are the outcome of accumulated experiences with plant-people relationship to maintain their socio-cultural identity. These were carried over generations without any written documents. This paper focuses on the present socio-cultural condition, indigenous knowledge and their relation with plants moving for centuries with least damage to the environment and at the same time coping with challenges in current situation ahead.

The data are based on the field studies applying interview, observation, participation and household survey was carried out from September to October 2001, with a focus of a wide range of socio-cultural and ethno-botanical aspect at Mekhala village with a universe 32 of households. These methods were applied to collect the data on ethno-history, legends, tribal stories, rituals, ceremonies and their genealogical history. Data were gathered on plant resources i.e. nutrition, household equipments, agricultural equipments, fuel, fodder, timber, medicine in the past and present challenges, their perception on changes of the local environment. For the ethno-botanical data collection artifact interview was taken (interview with specimens of plant). Secondary data were collected from GOs, police post, school, health centre, political leaders, social workers, village profile, relevant documents, literature and publication to the related topics and were analysed descriptively.

### 4. Results and Discussion:

# 4.1. Socio-cultural aspects

### 4.1.1. Economy

The major subsistence activity of the local people is agriculture and animal husbandry. Both of these economic activities are of subsistence level characterized by low productivity. The agriculture land is comparatively less and mainly covered by "Pakho Bari." Important crops grown in the "Pakho Bari" are the maize (*Zea mays*), millet (*Eleusine coracana L.*), cheno (*Amaranthus species*), radish (*Raphanus sativus*), potatoes (*Solanum tuberosum*), Rayo (*Brassica junceae*) etc. which are economically and ecologically important production of this region. "*khet*" is the irrigated low land on which rice is grown, whereas the area of "Khet" is so less. Eighteen households do not own *khet* for rice (*Orize sativa*) production. Agriculture works are undertaken almost around the year, maize, millet, cheno and rice are the main crops of this area.

Animal husbandry is another important subsistence strategy adopted by the local people, which is closely associated with the agriculture production system. Cow, goats, sheeps, fowls (chickens) and buffalo are the main livestock of the Mimi VDC. After the summer agricultural work, livestock are brought in pasture land called 'goth sharni." Dudhilo (*Ficus neriifolia*), gogan (*Saurauia nepaulensis Dc*), khanyo (*Ficus semicordata*), kutimro (*Litsea monopetala*), kimbu (*Morus alba L*.) are main fodder plants and used in almost every households. Other fodder plants are also used as according to their necessity, number of cattles and their availability.

Economic condition of the Aidy is below the poverty line. Nearly 99% of the people are engaged in agriculture and animal husbandry. But only 18.75% had 9 to 12 month sufficient to meet their annual food requirement from agriculture production and 81.25% are below this level. In high altitudinal range and steepy area, production of rice ranges from 150 to 300 kg. They consume rice in their rituals and religious, ceremonies feasts and festivals only. The number of goats is the highest and buffalo are less. Cow is the main source of ghee and milk.

#### 4.1.2. Education/Health

The literacy rate of the Aidy man is 21.72% and women is 9.52% and average literary rate is 16.12% which is negligible in comparing with the average national literacy rate (42%) (CBS 2001) and only two men have passed SLC.

Most of the people of Mekhala are not aware of the health and sanitation. They have been using unsafe water from canal and have no toilets. This village was not an exceptional from other ordinary villages of Nepal. Men and women do shared work but women are still bound more in household work than productive work. Women are so backward in the sense that they were shy and were unable to share their problems with new comers. Only few members of women participate in social work and are not aware about women's rights. Though all the family members of a house take part in discussion before deciding every major work, most of the decisions are made by elder male. Polygamy marriage system has started to change into monogamy. Arranged, love, capture types of marriage were found commonly. By the expression of *Deuda* song, boy and girl express their love of each other. If both were agreed there were no objections from their parents. All the houses are made of stone soil wall and with mud roofing. The first floor of house is used for cattle. The second and third floors are used only for human purpose. People use the ladder called *Lishno* made up of single tree of Salla (*Pinus wallichaina*) or Uttis (*Alnus neplalensis*) having small step for climbing the upstairs.

# 4.1.3. Language

Aidy of Mimi VDC, speak Humli language. The Aidy language is the mixture of Indo-Aryan and Tibetan group. The alphabet of this language is written in Devanagari script. They called *Thara* for house, *Chiula* for bread cooked in oil, *Agras* for rice, *Thochha* for shoes and *Cochya* for cloak etc.

Aidy, believe that god created human beings, which is found in their legends. Their behaviour is guided by their religious norms and values which make them a more cohesive group. *Jaisi* fixes the puja and they take care that all duties including the goods and spirits. Being the habitation of the people in temperate region, they wear cotton cloaks and trouser in summer season mainly three months and woolen cloths *cochya* and *jugilo* of woolen (goat and sheep) in the rest month of the year. The women wear *gunea*, *cholo*, trouser and *gawan* of wool. Both men and women were shoes made up of wool called *Thochha* to save from the sever cold of snow. Aidy women wear the *Aalanga* of silver, *phuli*, *bulaki*, *tra* (bangle like ornaments), shellac, rings on finger, *Jale* neckless (multi coloured glass bead) is most attractive and popular. In the past, they did not use gold ornaments but nowadays they have been using very little ornaments made of gold. Most of the Aidy people are non-vegetarian. The keep domestic animals like he-goats, she-goats, sheep and fowls and use for meat purpose. The wild animals like deer, *ghoral*, *jharal*, *laduwa and kalise* for meat. Their staple food grains are maize, millet, phaper, barley and cheno. They eat rice in their special occasion and festivals. Men and women both use cigarette, mainly in sulpa and take wine due to cold environment.

# 4.1.4 Song and Dance

The deuda song and dance is a special dance of Aidy. Aidys sing and dance a lot. The songs are called deuda, chachi folk chutekila and folk songs. In a pasture land, when a person sings folk lore of dejection it touch the heart deeply of any one. I was also assemblaged in *deuda* song after the evening meal. Some of the pieces of *deuda* are mentioned here.

Deuda	Meaning
<b>Girl:</b> Habijahaja bainako lagi karale khandi chhaun; sastai tara bolabichara tehite ma bhandi chaauz gai maina z gai, trisanale vet vai maina vet vai	To make airport we are digging the sloppy area. With deep thinking, I told it with you. Like an aero plane the maina goes out and we are meeting here with our desire
Boy: Bhotana pari bhotana wari chaurai gai puchhailo; ranki; ja nepali ghata gari lu uchhailo. z gai maina	Both side of Bhota (Tibet) walking chauri cow with shaking it's nice tail. Ringing big bell of Nepal, let us do enjoyment. Like an aero plane the maina goes out and we are meeting here with our

	desire		
Girl: Sulpa tero sapi mero	Sulpa is your, but support is mine,		
tona mullukaune, aafuta	in which we fire? You are already		
gharabaria hunnaya malai	engage with other girl but		
halukaunya.	persuade me?		
Z gai maina	Like an aero plane		
Boy: Yaka humlaki yaka	One of you in Humla; one of you		
jumlaki yaka mugu kholaki;	in Jumla and one of you in Mugu		
mochha bollaya shai	stream. You don't believe my		
mandinnau peta chiriya holaki.	words, may you believe to split		
Z gai maina	my heart.		
	Like an aero plane		

Aidy indigenous were entertained with many festivals through the year. Festivals are major aspects of people's life. Religion, ethnic festivals and rituals help reinforce or reduce the degree of ethnicity adherence. Festivals and ritual might increase group participation and feeling. They celebrate *purni, maghe, tihar, chaitrastemi, saune sakranti, dashain*. In *saune sankrati* they throw (fling) the burning *Jharo* one by one on south direction by saying the following words.

"Allai ballai rogha rayala, kala kalmet baija, Rato balla baija, seto balla aaija, subikala aaija, anikala baija, jai rala khola gayo."

Meaning; Oh! God from our surrounding, all types of disease, disease indicators, worse environment go out. Red ox (symbol of unfortunate) to go out and white ox (symbol of fortunate) to come in, hunger situation to go out and affluent situation of food is to come in. All worse and bad situations to flow with *Jairala* storm.

Aidy say that festivals help social integration because during the time of feast and festivals. The Aidys gather in a common place and interact with each other and enjoy themselves singing, dancing, eating which brings the idea of we feeling and encourage the sense of communalism, so they would be integrated.

# 4.1.5 Life Cycle Rites of Aidy

Married pregnant women is not allowed to climb the steep slopes and trees, even they are not allowed to cut down the bamboo shoot and not do any sort of violence. After the child birth, an experienced old women bathe the child and placenta is kept in *kharsu (Quercus semicarpifolia)* plates and burried in secret area. It is easy to prepare the plate of *kharsu* leaf and they feel the leaves are pure or holy. "Asidene" (Naming) took place on the 9<sup>th</sup> days after the birth and it is social significant to provide the name, identity to the child. All the relatives and neighbour bless 'Asi' (aashis) for long life, increasement of prosperity, good harvest etc. 'Vedni' (Chhewar) is done in the age of 9 or 12 yrs. and Jaisi Brahmin (Devkota Bar) celebrate *Chhewar*. In the evening all the villagers gathere and play Chachi folks Chutkial till the night. The boy wears a pair of Daura Surawal with a Khukuri near the abdomen and half kilogram rice having two spherical sweet meat. They believe that it is the symbol of preparation to visit next territory of the *battuck* to gain practical knowledge. Khukuri is useful to fight with enemies and preparation of hut in the new environment. Rice and meat is food for survive at that time. For the respective person the boy give gift of white cloth (pagari). The respective relatives give money, goat, sheep, cow, ox or land as a gift for the boy. Arranged, love, captured, jari and widow marriage are in practice. A unique feature 'Budho Pasni' is performed in atmospheres of joy, happiness and exuberance. The dead body is kept on the ladder prepared by pinus, pipal and rope of babiyo covered by yellow pat towards the mouth and red towards the leg. They think that pipal (*Ficus religiosa*) is the symbol of god, pinus and *babiyo* is pure and useful to prepare ladder to keep dead body. *Pat* is a special kind of cloth which is pure and used to remove polluted situation which is related just before by soul. They bring the dead body and burry at Meghi bagra of Karnali, River. It is not necessary to involve in funeral rites for son and daughter. Only elder son should not eat milk, meat, pagari and sit on mat of skin up to 8/9 or 12 months of the death date. The actual purification rite is the *Gayan* fixed by *Jaisi/Devkota bar* but performed by main lama by the preparation of effigy (*The Khamu covered by the cloths look like as man*). At the end of this rite lama as well as all other people take bath and purify from death pollution eating cow milk.

## 4.2 Ethno-botanical aspect

The prefix- "ethno" is generally used to refer various types of indigenous knowledge among different groups. This term plays a vital role in the accurate description and analysis of cultural and technical knowledge, process and areas of knowledge. As they are locally understood vernacular terms can rarely be translated as brief glass. The term ethno-botany is a part of indigenous knowledge system and a branch of cognitive anthropology which describes the use of plant related with the culture, belief and practices. Though, rural people are uneducated, innocent, they possess an invaluable fund of knowledge about the environment which are initiated and developed themselves for the survival of their communities. They have deep knowledge of the properties and ecology of locally occurring plants and rely on them for foods, medicine, fuel, building materials, dye, tannin, gum, resin, fiber and other products. Among them, medicinal plants play vital role to boost up the economic condition of the people.

The medicinal plants have formed an integral part of treatment from the beginning of human civilization. The knowledge of primate man has been modified very much with the advanced of civilization. 80% of the people in developing countries rely on traditional medicine for their primary health care and about 85% traditional medicines involves the use of plant extracts (WHO, 1992). It has been estimated that about ¼ of the medicines contain active ingredients plants over 3000 antibiotic come from micro-organism. Religion influences human lives. As analysed by Porrender in 1963, the human health is not only understood from biophysical point of view but also from psychological, spiritual and socio-cultural ones. Similarly, each community has its own local diseases and health beliefs and indigenous healer are able even to train professionally educated doctors. They are able to understand the effective socio-cultural variables playing major role in health condition. Aidy of Mimi have their way of traditional healing practices. They use 58 plant species to heal the human and domestic animal diseases. These consists herbs, shrubs, climber and trees. Mostly they use root and rhizome, leaf, bark, flower, fruit, seed and whole plant according to the nature of disease and the properties of the plant parts. Some of them are given in the table.

Local Name	<b>Botanical Name</b>	Iabi	irts us	Uses
Tilailo/firfire	Acer acuminatum	Т	Wd	Industrial, gastric
Bikh	Aconitum ferox	Η	Rz	Extremely poisonous and used in leprosy, fever, cholera and rheumatism
Bikh	Acnitum spicatum	Η	Rz	Medicine
Thotne, chaunle	Aconogonum molle	Η	Rz	Appetizer
**Jimbu	Allium hypsistum	Η	Wp	Used as spices, and common cold, and appetizer

* Ban lasun	Allium wallichii	Η	Bu, Tu	Gastric as appetizer
* Kurilo/Satavary	Asparagus racemosus	Cs	Rt	Refrigernat, diuretic, antispasmodic, diarrhea diabetes, brain complaints
Thulo ausadi	Astilbe rivularis	G	Rt	Medicinal
Pakhanved	Bergenia ciliate	G	Rz	Medicinal
Pahele	Coryadalis chaerophylla	G	Rt	Used in fever and disorder of stomach
** Panchaunle	Dactylorhiza hatagirea	G	Rt, Tu	Paste applied on wound
Atis	Dephinium denundatum	G	Rt	Tuber is used for the fever
Rektamul	Geranium ruberaria	Η	Rt	Use in fever, menstruation trouble and dysentery
** Siltimur	Lindera neesiana	S	Se, B, Fr	Aromatic, tonic in fever, cholera, toothache, stomachic
** Jatamansi	Nardostachys gradiflora	Η	Rz, Rt	Useful in leprosy, epilepsy, hysteria fever, stomachache, constipation, medicinal oil
Satuwa	Paris Polyphylla	Η	Rz	Antidotic, anthelmintic
** Kutki	Picrohiza scrophularriflora	Η	Rz, Rt	Cold, bile problem, fever, high blood pressure, gastritis, intestinal pain
** Ganaino	Pleurosperum dentatum	Н	Rt	Chronic, common cold, aromatic
Dhatelo	Prinsepia utilis	Т	Fr	Oil is used in rheumatism
Padamchal	Rheum austral	Н	St, Rt	Fracture, sore, gastritis, bleeding during menstruation
Chulte amilo	Rheum weffianum	Η	Rt, Rz	Purgative, astringent and diarrhea

** Sunpati	Rhododendron anthpogon	S	L, se	Medicine, essential oil.
Bayajadi	Tanacetm dolichophyllum	Η	Rt	Medicinal and aromatic
Ghoda marcha	Thymus linearis	Η	Wp	Used as medicinal, herbal tea
Sugandhawal	Valerianna jatamansii	Η	Rt	Headache, sore throat, indigestion
Rt- Root	Wp- Whole Plant	nt Tu-'		er L-Leaf
B- Bark Wd- Wo	se-seed	Fr	- Fruit	KZ- Knizom St- Stear

Source: Field Survey, 2001 (Sapkota P.P.) \* This medicinal plants are important for commercial purpose.

\*\* The major source of income comes from by selling these medicinal plants.

The medicinal plants are useful to treat fever, headache, cough, cold, skin disease, asthma, jaundice, removing warms, stomach aliments, facture, gynecalogical disease of female and heating sensation. They are mostly used, in the form of juice, powder, decoction, paste, liquid form, goli etc. They use 25 species for fodder, 12 cultivated plant species, 8 species for making agricultural equipment, 35 wild edible plant species, 22 poisonous plant species etc. They used 22 species in different ritual and ceremonies they are given in the table below.

Bu-Bud

S.N.	<b>Botanical Name</b>	Nepali Name
1.	Eulalioplis binata	Babiyo
2.	Magnifera Indica	Amp
3.	Emblica officinalis Gearth	Amala
4.	Artemisia valugris L.	Titepati
5.	Rhodedendron arboretum	Laligurans
6.	Poinsettia pulcheima	Lalupate
7.	Cynodon dactylon L.	Dubo
8.	Dendrocalamus spp.	Bans
9.	Thysanolanena maxima	Amriso
10.	Buddleia asiatica	Bhimsenpati
11.	Michelia kisopa (buch-Hamex Dc.)	Champ
12.	Melastomes normale	Angeri
13.	Ficus bengalensis L	Bar
14.	Ficus religiosa L	Pipal
15.	Ficus semicordata	Khanayo
16.	Pinus wallichiana	Salla
17.	Prunus ceasoides	Painyu
18.	Quercus semicfafrifolia	Kharsu
19.	Dioscorea bulbifera	Tarul
20.	Juniperus recurva	Dhupi
21.	Oroxylum indicum vent	Tatalo
22.	Curcuma angustifolia	Hadelo/hardi

Source: Field Survey 2001 (P.P. Sapkota) - Amp, Amala, Bar, Pipla,- used in marriage and reverence ceremonies

- Lalupate, Painyu, Dhupi, Tatalo, Ritepati, Dubo, Laligurans, Chanp- used in reverence ceromonies.
- Titepat, Bans, Painyu, Dubo, Babiyo, Hardi- used in Chewar ritual.
- Kharsu- used in birth rites
- Salla, Pipal, Babiyo, Dubo, Titepati- used in death rites.
- Khanyo/Timilo- used in religious rites in honour of the manes.
- Salla, Amriso, Chanp, Angeri- used in Saune sakranti festival.
- Tarul- Used in Maghetihar festival.

#### 5. Conclusion

Socio-cultural and ethno-botany is the multidisciplinary approach including the method, theories and concept of sociology, anthropology and botany. Aidys have their own language, traditional technology, ethno-history, belief system which are functional in relation to their social system and ecosystem. The major subsistence strategy of the Aidy's is agriculture and animal husbandry but the productivity is less and only few families can sustain from their agricultural products. They have very poor condition not only economy but also in education, sanitation and economic condition. The Mimi VDC is rich in medicinal plant species. Their major source of income comes from selling medicinal plants. People lack scientific knowledge of management and harvesting of most important and useful plant resources. Aides are rich in their cultural, rituals, folk songs, ethno-history, myths and legends. Their cultural identity show emotional ties towards such plants which can play a crucial role in the conservation of such plant species. The investigation shows an intimate inter-relationship between people, culture and their natural environment, which influence the social status of the people.

Massive exploitations of useful plants, over grazing, lack of awareness, over harvesting of medicinal plants without proper management, extremely marginalized socio-economic condition is leading towards deforestation, extinction and destruction of bio-diversity. This paper is prepared to high light this ethnic group, document, revive and transmit the socio-cultural ethnobotanical knowledge of Aidys development and for the maintenance of socio-cultural identity.

#### References

- Adhikari, S.P. 1982, Rural Development of Nepal, Problems and Prospects, Ktm. Sajha Prakashan.
- Bhattari, N.K. 1992, Medicinal Ethnology in the Karnali Zone. Economic Botany 46 (3)
- Berkardi, B 1979, An Anthropological Approach. The Problem of Plants in Traditional Medicine: Elevien Sequoa S.A.
- Coburn, B. 1984, Some Native Medicinal Plants of the Western Gurung Kailash: A Journal of Himalyan Studies 11.
- Durivedi, P: K. 1982, Nepalese Society, National Museum, Kathmandu, Nepal.
- Gurung, H. 1996, Medicinal Plants and Traditional Doctors in Sheyphoksundo National Park and other Areas of the Dolpa District, WWF.
- HMG/N, 1970, Medicinal Plants of Nepal. Bull No. 3,. Dep. of Medicinal Plants
- Horskovits, M.J. 1974, Cultural Anthropology: An Abridged Revision of Man and His Work. New Delhi: Oxford.
- Malla, S.B. and Shakya, P.R. 1984, Vegetation and Medicinal Plants of Nepal. Department of Medicinal Plants, Ktm.
- Manandhar, N.P. 1996, A Contribution of the Ethno-botany of Mooshar Tribes of Dhanusa District Ktm. Nepal, J Mattist Press.
- Manandhar, N.P. 1982, *An Ethno-botanical Study of Nuwakot, Nepal.* In Preceding of First National Science and Technology Congress. NCST, Ktm.

- Sacherer, J. 1979, *High Altitude Ethno-botany of the Rolwalling Sherpas*. In Contribution to Nepalese Ttudy 6 (2).
- Sapkota, Sarkar, Shakya and Shrestha, 1994, Indigenous Medicinal and Non-commercial Food Plants in Village of Palpa and Parsa District WWF, Nepal.
- Sapkota P.P. 2000, *Ecological Study and Traditional Uses of Medicinal Plants at Malika Forest Baglung*. A Dissertation Submitted to the Department of Botany, T.U. Ktm.
- Sapkota, P.P. 2000, Study of Medicinal Plants, Their Distribution and Ethno-medication of Lekhani, Baglung. Research Report Submitted to U.K. Forestry, Baglung.
- Sapkota P.P. 2003, Socio-cultural Condition and Ethno-botanical Knowledge of Aidy Community: An Anthropological Case Study of Mimi VDC Humla, Nepal. A Dissertation Submitted to the Department of Sociology/Anthropology. T.C. Multiple Campus, Ktm.
- Sharma, P.R. 1995, Culture and Tourism: Defining Roles and Relationship ICIMOD.
- Steward J. 1995, Theory of Cultural Change. Urbana: University of Illinois Press.
- Shrestha P. 1985, *Research Note Contribution to the Ethno-botany of the Palpa Area*, Vol. 12, No. 2, CNAS.