

**Trans-Himalayas:
From Livelihoods Vulnerability Perspective -
A Case of Upper Mustang**

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About this report

The report is essentially about livelihood vulnerability in the Upper Mustang, the isolated and difficult part of the country. Report highlights the unique features of Upper Mustang in terms of geo-ecology, socio-economy and socio-culture. Current exposures witnessed by the area, both of local and non-local origin, have been discussed. It is traced out that those exposures in totality were responsible for bringing about changes in socio-economic as well as wider environmental fronts. Three major groups: namely sedentary occupationists, nomadic pastoralists and the religious sects are identified whose means of livelihoods conspicuously differ within and between each of them and so do the respective vulnerability contexts. It is argued that interventions are yet to be able to adequately address those vulnerability contexts. Suggestions are made in favour of intervention that is likely to bring about ethically sound and practically implementable development or conservation goals. The work is essentially based on about two week's trek in Upper Mustang. A more intensive study may be required to have more in-depth information on the issues dealt.

The paper starts off by contextualising the vulnerability context, which is followed by introduction of upper Mustang. Unique features that differentiate it with rest of Nepal in terms of geo-physical conditions and socio-culture are dealt. This is followed by presentation of a brief account of internal and external factors that have been responsible for bringing about some noticeable changes. The following sections present the current sets of livelihoods and associated vulnerabilities, followed by conclusion.

The work is based on about two weeks of trek in Upper Mustang in January 2004. Participatory Rural Appraisal (PRA) was essential tool that was used to acquire information. This consisted of personal observation and informal discussions with ordinary villagers, key informants, local GOs and NGOs staff. Oral history constituted the bulk of information source.

*We sincerely acknowledge the welcome gesture provided by Ram Chandra Poudel, Senior Officer at ACAP. Our sincere thanks goes to Hira KC, ACAP Ranger deputed in Upper Mustang and Man Bahadur, the porter who accompanied us to virtually all of the places we covered and constantly shared rich knowledge they have had while working for ACAP for several years in this remote part of Nepal. **Likewise we are grateful to people of Upper Mustang who, despite their busy schedule, gave their time and effort in sharing their deep insights.***

About Western Regional Forestry Directorate (WRFD), Pokhara

WRFD, Pokhara is one of the five Regional Forestry Directorates that are located in each of the country's five regional headquarters. The directorate is responsible for supervising, monitoring, evaluating and supporting the programmes, projects and activities the sixteen districts of the region implement. The concerned districts are Nawalparasi, Rupandehi and Kapilbastu in the Terai; Gorkha, Tanahun, Lamjung, Kaski, Syangja, Palpa, Gulmi, Arghakhanchi, Parbat, Myagdi and Baglung in the hills; and Manang and Mustang in the Himalayas/Trans-Himalayas.

Currently a number of projects are operational in this region whose focus range from nature conservation to community forestry and forestry-based livelihoods. The major programmes/projects include:

- *NARMSAP (Responsible for Community Forestry in Kaski, Syangja, Palpa, Gulmi, Arghakhanchi, Tanahun, Lamjung, Gorkha and Manang and Soil Conservation and Watershed Management Programme in Baglung, Myagdi, Tanahun, Palpa and Lamjung)*
- *LFP Hills/Terai (Involved in livelihood focussed forest conservation in Parbat, Baglung, Myagdi, Nawalparasi, Rupandehi, Kapilbastu)*
- *JICA (Participatory soil conservation in Kaski, Parbat and Syangja)*
- *TAL (Wildlife corridor development/conservation in Palpa)*
- *ACAP/MCAP: (Nature conservation in Manang, Mustang, Lamjung, Kaski, Myagdi/Gorkha)*
- *HLFDP (Hills Leasehold forestry development in Tanahun, Gorkha, and Lamjung)*

WRFD strives for participatory, gender focused and pro-poor natural resource management and believes that there is no known recipe for the same. It aims for experiential learning mode of intervention, which revolves around the principle of action research, based on 'learning by doing' principles. Consequently, we consciously look at the interventions so as to learn from the strengths and weaknesses those make while implementing the programmes.

*The current series is meant to share our knowledge so that the overall understanding would become much richer from valuable feedback from you all. We essentially have two types of paper series: i) discussion paper and ii) miscellaneous paper. While the first relates to the papers that we produce in the course of our official involvement within the region, the second tends to embrace the work outside but is pertinent to our institutional objective. **The views expressed in these series are the outcomes of the studies and in no way should be considered as official statement/policy of WRFD, or HMG.** Please do not hesitate to contact us if you have comments/queries on the subject or have an interest for future collaboration.*

Abbreviations

ACAP	Annapurna Area Conservation Project
BK	Biswa Karma, An occupational caste (blacksmith)
BS	Bikram Sambat, A Nepali calendar which is roughly 57 years ahead of Gregorian Calendar
CAMC	Conservation area management committee
CARE	Centre for American Relief Everywhere, An American INGO
CBS	Central Bureau of Statistics
DDC	District Development Committee
DFID	Department for International Development
GEF	Global Environment Facility
GO	Government Organisation
HH/s	Household/s
HLFDP	Hills Leasehold Forestry Project
HMG	His Majesty's Government
Ha.	Hectare
KMTNC	King Mahendra Trust for Nature Conservation
JICA	Japan International Cooperation Agency
LFP	Livelihood Forestry Project
LU	Livestock Unit
MDSA	Mustang Development Service Association, A Japanese NGO
NARMSP	Natural Resource Management Sector Programme
NGO	Non-governmental Organisation
MCAP	Mansalu Conservation Area Project
PRA	Participatory Rural Appraisal
RADC	Rural Area Development Committee of Ministry of Local Development
RCUP	Resource Conservation and Utilisation Project
SLA	Sustainable livelihood approach
Sq.Km.	Squire Kilometer
TAL	Terai Arc Landscape
TISC	Tree Improvement and Silvicultural Project
UK	United Kingdom
USA	United States of America
VDC	Village Development Committee
VHF	Very high frequency
WRFD	Western Regional Forestry Directorate

Common terms

Gompa: Monastery where people can pray, stay and learn religious doctrines.

Mukhiya: Traditionally, a tax-collecting authority. The role of *Mukhiyas* in Mustang has been changed in a way that he is now responsible for overseeing communal activities including dispute arbitration at the local level.

Laama/ Jhuma: A monk/a nun

Ngyalmo/Ngyalu: The offspring of illicit sexual relationship. *Ngyalmo*-a female and *Ngyalu*-a male child from such birth.

Tharchyang: A ritual ceremony performed in an old age. After this ritual the concerned individual is considered as a senior citizen and hence s/he does not need to take part in social works requiring voluntary labour.

Context

The inevitable need of considering people's vulnerabilities by development interventions were being emphasised by some leading scholars as early as 1980s (see for example Chambers, 1983). Blakie, Cameron and Seddon (1979) presented a very sentimental case from Nepal where they saw that people in rural Nepal are socio-economically very vulnerable and that the country as whole would run into "crisis" unless the situation is addressed. The concept, however, failed to get a specific focus as late as 1990s when Department for International Development (DFID), UK ratified the sustainable livelihood approach (SLA) to its aid policy. SLA provides a holistic pictorial model that would depict how the local people set their livelihood strategies and design subsequent activities in the face of their available capitals (human, natural, financial, social and physical), prevalent policies and the potential vulnerability contexts (see for example, Ellis, 2000, DFID, 2000). Unlike the previous development models which aimed merely for "subsistence", "income" or "employment", the framework is radical in that it considers the livelihoods in totality including vulnerability context the people face. The concept now seems to have been internalized within the DFID system and appear to have been gradually penetrating rest of the aid agencies operating in various parts of the world including Nepal. Major Nepalese forestry projects now have realized the pivotal role of vulnerability contexts in sustainable livelihoods. This hopefully sets the background why livelihood vulnerability analysis is important in the Trans-Himalayas, the current topic of discussion.

Unique upper Mustang

Upper Mustang, consisting of seven village development committees (Area 5,562 sq. km.) in the Trans-Himalayas, is a unique system in geo-ecology, socio-economy and culture. The uniqueness coupled with perceived vulnerability associated with them may be important reasons why it remained officially closed for tourism up until 1992 when the area got opened for controlled form of industry (Matthiessen, 1995).

Uncommon geo-physical environment

Trans-Himalayan location causes a rain shadow, and hence a zone of very dry high altitude steppe. The principal woody vegetation consists mainly of *Caragana*, *Astragalus*, *Lonicera* and *Rosa*. However, *caragana* largely dominates the landscape. The grass species include *Alamos*, *Stipa*, *Penisetum*, and *Potentilla* in the lower reaches and *Poa*, *Carex* and *Copresia* in the higher slopes. Unique floral composition combined with typical terrain and the associated climatic conditions make the place a home for rare wildlife species like snow leopard, wild ass and blue sheep (KMTNC, 2002).

Inaccessibility combined with adverse conditions means a static human population (population figure has in fact staggered to 5,395 in 2001 compared to 5,694 a

decade ago: CBS, 2001). Illiteracy rate is as high as 57 per cent. Area is very sparsely populated (2.5 people per sq. Km) and the per capita agriculture land holding is merely 0.35 ha.

Uncommon Socio-culture

The population essentially consists of Buddhists of Tibetan origin, which comprises of high caste Bistas (traditionally *Kuduk*), middle class Gurungs (traditionally *Phalwa*) and the low caste Biswa Karmas or the BKs (traditionally *Ghara*-the blacksmiths, *Shemba*-the butchers and *Emeta*-the musicians: ACAP, 2003). Number of nomadic pastoralist (locally-*Dhokpa*), though sharply declining, over a dozen of them still struggle for their livelihoods in the more inaccessible higher altitudes. The sedentary farmers tend to adopt a mix of livelihood strategies consisting of crop production, the grazing and the trading. Seasonal migration is a common feature in which many people travel mainly to Pokhara throughout the harsh winter months. Earnings from seasonal migration account for as much as 42 per cent (ACAP/WRUP, 2002). Those who manage to go overseas tend to have much more income than the rest.

The honorary King is still recognized as a patron who exercises his traditional power personally or through *Mukhiyas*¹ assigned from amongst nobility members. His role as arbitrator is notable in that his verdict is hardly challenged and scarcely any one seeks to adopt legal means.

Voluntary work for community purpose is a popular practice in which all grown up adults are supposed to take part except the elderly ones who have received the status of a senior citizen after having commissioned a rite called *Tharchyang*. Community rights are often attached with duties, which are often in a direct proportion. For example, number of days one can irrigate his fields through common irrigation canal is proportional to quantum of labour he would be sending for constructing or maintaining the irrigation canal. The quantum of labour, in turn, is determined by quantity of field that requires irrigation.

Polyandry, though declined (Gurung, 2001), is still prevalent amongst some households (HHs) where a single woman gets married to all brothers in the family. By tradition, the eldest son and the wife control the parental property and are more powerful as well as responsible to all HH decisions. The second son and daughter are expected to be *Laama* and *Jhuma* respectively who are supposed to remain unmarried (this is excepted for *Shakypa* sect) and serve the deity by adopting a religious life. Rest of the sons, are mostly left on their own particularly if they decide not to accept a common wife with his elder brother.

The society is a sex tolerant one in that very little obligation is attached with unlawful sexual relationship with an unmarried girl leading to a birth. If wished, the father of the newborn baby can acquit himself when he presents a small amount of money

¹ Traditionally, a tax-collecting authority. The role of *Mukhiyas* has now changed in a way that he is now responsible for overseeing communal activities including dispute arbitration at the local level.

and a scarf (locally: *Khata*) to the parents of the concerned girl during the name giving ceremony (Gurung, 2001).

Exposure to change

The virtually pristine region has for some years been exposed to the influence of change agents both of internal and external origin. The intra-state and extra-state activities and the milieu as well as the climatic factors are attributable for the change. Apparently the cadestral survey of 1975 (2032 BS) instigated people to procure citizenship certificate who until then had seen little value of the same. This was the time when all lower caste people were bulked into BKs, which was presumably done for the sake of simplicity in specifying the name in land certificate that the survey would produce. This move apparently undermined those who were already downtrodden by way of masking their cultural identities.

Tibetan *Khampas* who made their way into the area since 1950s with intent of making a base for liberating Tibet (Marullo, 1995) left big social and environmental impact over the region until their movement was finally suppressed by Nepalese army in 1973. *Khampas* were considered as real social threats who recklessly cut the already scarce trees and extorted personal food and wealth from individuals.

Eventually Chinese decided to close the Tibetan border for fear of rebel from *Khampas* (Marullo, 1995, Matthiessen, 1995). This seems to have had profound impacts particularly on grazers in the vicinity of border, who until then were virtually free to take their animals for grazing across the border.

Recent years have witnessed the linking of the area with seasonal transportation both from Tibet in the north (by dirt road) and lower Mustang in the south (along dry Kali Gandaki riverbed). This seems to have left a significant impact on the socio-economy of the place. Telephone facility through affordable VHF sets, lighting through solar and micro-hydroelectricity, and cooking and heating through modern cooking cum warming stoves have changed the life of a number of people at least in relative sense.

A number of development interventions in combination also seem to have had conspicuous impact in the region. The major interventions include:

- RCUP, Resource Conservation and Utilization Project - an USA supported project (1982-1987) that essentially concentrated on forest resource development and soil and watershed conservation
- CARE (1989-1998)-This focused mainly in infrastructure development, agriculture and horticulture, water and sanitation, child health and sanitation.
- RADC, Remote Area development Committee (An ongoing HMG initiative for rural infrastructure in remote districts)
- MDSA, Mustang Development Service Association - Japanese NGO concentrating mainly on agriculture and rural infrastructure
- ACAP, Annapurna Area Conservation Project-A project of King Mahendra Trust for Nature Conservation (in operation)

Changes

Exposures that have been talked about seem to have impacts on a number of areas including socio-culture, economy and the environment.

From tradition towards market economy

Many people, who prowled in the lower altitude for alms during the harsh winter months, no longer do so. They, instead do a number of businesses in Pokhara, Kathmandu and Indian cities during such periods in particular. Recent years have witnessed still bigger lip in the way the people leave their home in search of employment elsewhere. Some people often make their destinations to countries like USA and Japan some times by legal means and by illegal means in the others. Such migration though may have contributed towards prosperity of the persons concerned, has conspicuously affected the local socio-economy. This has clearly contributed to labour shortage in the farming or non-farming areas. The gaps are often get filled from labour force who come from the middle hills in the south across Himalayas. This, though may sound surprising, is the reality in the changed political context where Maoist insurgency is widespread in other parts of the country and the people who want to escape from the same find here a safe haven.

Labour supply from the south would not suffice. Apparently the whole farming business is to be run in deficit or just in break-even point given that the labour remains still scarce and the rate is high. Besides, ever-deepening riverbeds tend to lower the irrigation potential. Many people feel that the irregular climatic conditions result into fluctuating water level in the rivers. Similarly, massive wind erosion constantly robs fertile soils and fills the gap with useless debris. Availability of more sophisticated Chinese stoves, though has enhanced household comfort, tended to divert more dung from farm to the hearth. Consequently, the local production cannot compete with truck-transported Chinese cereals, which though perceived to be of inferior quality, is much cheaper and hence transacted more. No wonder, crop production is being decreased and many lands are being abandoned or are put to other uses.

People tend to diversify their occupations to avoid risks. Goat and sheep rearing, trading, transporting, lodge keeping and retail shop keeping are amongst important occupations people tend to choose from. Some times they choose these as an alternative to farming but often as complementary to it.

Means of transport: from less efficiency to higher efficiency

There have been conspicuous changes in the mode of transport. While goats and yaks used to be the main means of transport until about three decades ago those were latter replaced by donkeys and then by horses and mules. These days even the latter animals appear to be in the process of being replaced by machine transport. Apparently many people now would have got rid of a number of mules and the horses had those been disposable through sale for cash or slaughter for meat. Consequently the prices of donkeys, mules and horses are really shoring down. Turning points are availability of machine transport along Lo Manthang-Tibet and Lete-Tsele transacts. Like wise, Yaks,

which once used to be the popular farm animal, has ceased to be so. These animals are now restricted only among nomad population, if any.

Values and practices: from tradition to modernity

King's role as a patron is gradually receding in the face of wider exposure. Those who worked for the king for free or for nominal wages, now receive wages comparable to the common wage rate, even though they have to give first priority to the king's work. The members of nobility, who worked for the king as *Mukhiyas*, tend to respond to the people's voices more than ever before.

Polyandry has ceased to be the common feature. Many people now prefer to spend an independent conjugal life despite some pressure on part of the elders and the economic risks that would entail. Likewise, *Laama* and *Jhuma* systems are also being liberalized. Apparently Non-compliance may not be seen too seriously particularly if decisions are taken in early part of their lives.

Nomadic pastoralists tend to be converted into sedentary occupation, if not suddenly, in phases. The hardships they have to face in the conversion process are little understood.

Caragana: regeneration or degeneration dilemma

We had a very interesting observation about *caragana*. Contrary to common belief, it was speculated that *caragana* has been regenerating, at least in terms of number, if not in terms of conspicuous biomass increment. While some local people agreed this, some others were not prepared to accept this proposition. We however tended to believe that our observations were not unfounded. Counts based in a random basis indicated that over 2,400/ha *caragana* plants were found even in sites, which, from distance, seen almost naked. This observation, of course did not remain unchallenged at least from some quarters who thought that whatever have been seen at present, far from being regeneration, were the remnant degraded stocks that have survived heavy extractions. However, this view cannot provide answer the ground reality where more healthy stock could be seen near the roads than in the mounds far way. People did not have satisfactory answer to our question 'why more profuse and healthy stocks were found in more accessible places despite the fact that those were more liable to over use!' Raut (2001:12) notes that *Caragana* owing to its thorny nature exhibits self-defense mechanism against grazing and trampling which may be the reason why the species withstands biotic pressure close to the main tracks.

It can thus be speculated that the changed conditions have contributed towards regeneration of *Caragana*, albeit at a slow rate, which is not easily noticed. It is apparent that the livestock dynamics and climatic variability favored *Caragana* to regenerate than to degenerate. We noticed that number of horses, mules and donkeys were gradually declining and so is their trampling effect over *Caragana*. Goats essentially browse, and are not likely to affect the regeneration of the species. *Caragana* owing to its very long taproots (we observed a plant with root: shoot ratio as high as 6:1) and the xerophytic nature (TISC, 2002) can tolerate an extreme climatic condition. Apparently the species

exhibits similar feature with that of *Sal* in the lower altitude, which *dies back* (proper term is *dying back*) only to regenerate when adverse conditions subside. Extremely slow (or even erratic) growth combined with high utility value may be the reasons why people do not easily feel the regeneration. The evidences, though supportive, are less than adequate and would require further work to be conclusive. This dilemma requires to be sorted as a matter of urgency especially in the current context in which interventions, (ACAP intervention in particular), presupposes about the deteriorating conditions of *caragana* (like any other) and is keen to reverse the trend. Should there be a spontaneous regeneration, the intervention might find a sense in diverting the scarce resource to other areas, leaving the recuperating species on its own.

Current Livelihoods

Current livelihoods revolve around three (but disproportionately varying) occupational types. Those are *religious sect*, *sedentary farming* and *nomadic pastoralism*. The first is tradition based culture in which the second son or daughter of each family is expected to sacrifice their active life in a holy pursuit (*Laama*, the monk-the male, and *Jhuma*- the nuns, the female). The *Laamas* often get financial support from those who have a faith or sympathy on their tradition. Significant exposure to the outside world would mean that not all individuals might opt to be a *Laama*. Naturally enough the individual choosing to be *Laama* is getting small in number.

A very small number of populations make a living through nomadic pastoralism. Current estimate suggests that there are less than two-dozen Nomadic HHs throughout Mustang. Main source of their income is their own livestock. However, some of them might make extra income by looking after the sheep or cattle herds of non-nomads. Opening of a dirt-road access from Tibet means that they can now have some additional income from goat *pasmina*², which is sold to the Chinese businessmen in Lo Manthang when they visit the place.

Sedentary farming takes the biggest share of all occupations. This group, unlike their nomadic counterpart, tends to choose a number of supplementary means. Those include services with the GOs and NGOs, local business, wage labor, goat and sheep rearing and use of pack animals for portering. Two types of business are identified namely; retail shops and hotels meant for the tourists. Wage labour includes agriculture labours, shepherds and helper in the course of trans-boundary fleets. Goat and sheep rearing is probably the most popular supplementary occupation. It is assumed that in several instances income from this occupation becomes the primary source and that the income from agriculture becomes only supplemental to it.

Vulnerability contexts

Sedentary population: multiple groups of people with multifarious vulnerability contexts

Theoretically all sedentary populations are vulnerable to drought and flooding. These incidences may be linked up both with natural and human induced phenomena. Those who are located in the river valleys are susceptible to flood. Chuusyar was struck

² Fine under-coat of high altitude goats which is prized for making high quality warm shawls.

by flooding caused by glacial lake outburst twice: once during 1985 (2042 BS) and other during 1987 (2044 BS). The 1987 calamity was the worse in which properties of as many as 35 HHs were swept away and at least 3 people and numbers of livestock were killed. In response the government offered to resettle 34 victimised HHs in Lalim Bagar near Pokhara. Given that the sources of many glacial lakes are even unknown to the villagers, one cannot even predict when the villagers would experience similar hazards elsewhere. Health service situation is very poor. There is just one 15-bed hospital recently constructed under MDSA assistance (MDSA 1999) and a couple of health posts operating under HMG. As per animal health service, there are merely 3 animal health sub-centres in Upper Mustang. No wonder people face a great deal of health risks and so do their livestock.

Given the heterogeneous nature of sedentary population, their livelihood strategies largely vary within the group and hence do their vulnerability contexts. Apparently the ones who migrate seasonally are less vulnerable at least during the period of their migration who tend to benefit in several ways. They are able to waive the harsh climatic conditions thereby also saving scarce food at home and having some extra income at the same time.

However, not every one gets this opportunity to come down to the south, let alone going abroad. Several, particularly amongst elder, children and disabled have little options than staying back at home owing to number of reasons including physical incapability. They naturally are forced to survive on poor or less decent diets and adverse climatic condition.

The trans-boundary traders face vulnerability of various natures. Often they lose a number of packed animals either due to the carelessness of the assigned caretakers or the unfavorable climatic conditions. Occasionally some goats and sheep are often reported to enter into the houses on the way which scarcely return to the flock owing to mal-intention on part of the house owner. It is perceived that such incidences are more common across the south of Himalayas than in the north.

Often the traders fall in the grips of army posts, which are known to extort a mule-load of apples or a live goat. In return they may force them to accept a nominal sum of money just to pretend that the stocks were not snatched. Additionally they may also be the victims of alleged haphazard tax collections by Village Development Committees (VDCs) or District Development Committees (DDCs).

BKs stand at the lowest societal niche. Their settlements are often segregated and they receive specific treatment. By tradition, they are supposed to limit their house to one storey and paint the upper part of the outside wall with red so as to distinguish the same with houses owned by upper caste Bista and Gurungs who tend to have more liberty on the matter. They are often located on the bank of river and are vulnerable to flooding. Their role as *Mukhiya* has been undermined in that they may not be assigned as *prime-Mukhiyas* as against what may be assigned to the rest. Their role tends to be limited to that of subordinates either as a *Subsidiary-Mukhiya* or a *Katuwal*, the messenger.

Apparently the non-first sons are vulnerable given that polyandry culture is gradually being given up but that the eldest son, by and large, is still the custodian of the parental property. The non-first sons thus lack adequate mechanism to insure their future livelihoods.

The implication of relatively "free sex" seems to be very severe on the descendents of such extra-legal practice. The progeny of such relationship is called *Ngyalu*, if male and *Ngyalmo*, if female. *Ngyalus* and *Ngyalmos* neither acquire parental property nor do social respects. Thus their livelihood vulnerability is at stake by birth. Probably *Ngyalus* may have better options for livelihoods than the *Ngyalmos* who could at least might choose to leave the place to work elsewhere unlike *Ngyalmos* who find little option other than working for the more affluent people locally in subservient way.

Birth of *Ngyalmos* or *Ngyalus* can be a real 'curse' to the mother who gives their birth. She is left on her own to bring them up as she fails to get support neither from the *de facto* father or his family members. Birth of *Ngyalmos* may be considered even worse owing to the reason that she would perpetuate the birth of *Ngyalmo* and *Ngyalus* for all her generations in the future and that the process remains a vicious cycle.

Nomads: the people in socio-economic isolation

Clearly, lives of Nomads are much more vulnerable than that of sedentary population even if at certain point in time they may own livestock with substantial monetary value. Both natural and social factors contribute towards their vulnerabilities. They are extremely prone to adverse climatic conditions and wildlife depredations and that they lack occupational diversity to avoid livelihood risks.

People generally believe that grass availability has declined over the years since the weather is getting unpredictable than ever before, which has clear consequence in number of animals they can keep and in their productivity. Unpredictable weather conditions in Upper Mustang are indicated also by preliminary climatic record analysis by ACAP, which would suggest an erratic nature of precipitation and temperature regime (pers.com. Nabaraj Chapagain, ACAP, 2003).

The nomads have suffered badly from regular wildlife depredation especially from snow leopards and foxes. This is mainly attributable to poor *coral*³ conditions, which virtually fail to prevent predatory animals from entering and killing a number of goats and sheep.

The nomads, besides the natural factors, are prone to a number of vulnerabilities owing to social reasons. The sedentary population often disregards the nomads who often laugh at their lifestyles. Likewise they are isolated and virtually deprived of all state sponsored services like schools, post offices, animal and human health services, subsidized food supply etc. unlike the sedentary counterparts who tend to get such facilities *albeit* to a meager extent. The state thus seems to be insensitive to the conditions

³ A roofless walled shelter for animals

of nomads. Nomads who normally graze on rotational basis, (which is largely determined by climatic as well as pasture conditions) tend to face heavy competition from sedentary people who generally lack such system. Apparently this has resulted the nomads to restrict their grazing territory to a higher and difficult terrain.

It is striking that they are too weak to control the market but are easily controlled by the same. The case of yak exemplifies their positions. Yak's meat, though rated locally as the best meat, may not be saleable outside Mustang district for apparent reasons including its religious value. Hence, they find a very little options to sell the stock outside the district no matter how best may be the meat quality. Similar may be the situation with goats and sheep, which though may be of superior quality are forced to compete with other low quality stocks brought from Dolpa and Tibet, thus fetch lower money than what it's worth.

This is not to suggest that nomadism is characterized by homogeneity in terms of interests and capacities and hence, the vulnerability context. Information regarding intra group heterogeneity are not available to tell more about the subject.

Jhumas: Women with obligations but with little support

Vulnerability context of *Laama* is little understood. The case of *Jhumas*, on the other hand, appears quite sentimental. While the culture expects them to remain unmarried for whole of their lives for the sake of divinity, they are least supported in terms of learning, neither of any spiritual or non-spiritual nature. This clearly contrasts with the support system for *Laamas* where plenty of *Gompas* await them to house and to teach religious dictum. As such, *Jhumas* severely lack separate *Gompas* where they could be housed or taught or that they could share *Gompas* with *Lamas*. The possibility for incorporating both *Lamas* and *Jhumas* under the roof of a single *Gompa* has been basically ruled out for fear that they may involve in illicit relationships with *Laamas* and thus the latter's religious ethos would be in jeopardy. Thus *Jhumas* are expected to pass a rather wretched life in that they cannot marry (at least in theory), and at the same time are deprived of learning. Of course the very keen ones may decide to travel to Muktinath (territory of lower Mustang) or even to the cities like Pokhara or Kathmandu but such movement is not so convenient. No wonder the number of *Jhumas* complying the tradition are dwindling.

Interventions and the vulnerability context

A cursory look at the contemporary interventions suggests that the concerns of those have been essentially on the development or conservation of the area in general. A concerted effort based on specific vulnerability situations has in fact been lacking. CARE, Nepal had concentrated on a number of basic things that the villagers required. Those included activities like drinking water supply, education, vegetable production and the like. People note that villagers who until some years ago were grossly ignorant with a number of green vegetables can now produce ample of their own during the appropriate seasons and that the inputs of CARE in the matter is significant. However, such innovations were meant for the specific locality in an aggregate, which naturally failed to

deal with vulnerability contexts that needed a purposeful dis-aggregation followed by an appropriate form of intervention.

Likewise MDSA has been focussing on schools, health facilities, and fruit orchard in some important pocket areas of Upper Mustang but has not been addressing a specific vulnerability context.

ACAP interest has been basically concerned to sustainable and integrated natural resource management through a number of designated programs. Those consist of natural resource conservation, alternative energy, conservation education and extension, sustainable community development, agriculture development, women in conservation and development, sustainable tourism, heritage conservation and reproductive and general health. Realizing the need of conserving the unique bio-diversity in Upper Mustang, ACAP is now actively pursuing a study to produce compendium for the ACAP Management Plan through Upper Mustang Bio-diversity Project supported by GEF. While the pursuit of ACAP is dynamic and has been geared towards sustainable participatory conservation and development, the project misses to take the account of the specific vulnerability contexts of various groups including nomads. Some personnel in ACAP go as far as pointing that the use of pasture by the nomads is merely a privilege given by the sedentary groups than their rights *per se*. They view that the Nomads, by definition, do not possess any registered piece of land and hence are not in fact the robust candidates for claiming robust form of grazing rights. It can be easily noted that this view is too resource centred and is much less sensitive to humanitarian dimension. Raut (2001) found that the nomads were even supposed to pay as much as Rs. 15,00 per annum to the respective VDCs for having used pastureland within their territories. Even the new management plan that is now being drawn up for Upper Mustang grossly overlooks the situation of the nomads which do not even include nomads in the category of the disadvantaged groups (Gurung, 2001).

ACAP's CAMC approach of resource entitlement to the respective VDCs seems to have perturbed indigenous use rights of local people and may be considered far from being practical. For example, the new system allows Chhoser village with 8408 livestock unit (LU) with 2260 ha of grazing land where as Lo manthang with nearly equal LU (7,057) enjoys merely about half (1240 ha) the grazing area (Raut, 2001:19). Apparently, outcomes of such anomalous allocation are being inflicted upon the nomads where the sedentary groups resort encroaching the territory of the nomads who are too powerless to defend themselves.

Summary and conclusion

The remote region of upper Mustang has witnessed changes in various fields including the socio-economy and the socio- culture owing to a number of internal and external factors. This however, did not necessarily contribute towards improving vulnerability context, particularly that of the weaker sections. It was noted that vulnerability contexts varied between the ones who passed a sedentary life, those who passed a nomadic life and the ones who wanted to choose a religious life. Likewise livelihoods vulnerability varied within each of those categories.

Clearly the Nomads have been the most vulnerable groups whose number is shrinking every year and interventions have turned blind eye over this reality. Sedentary groups who tended to adopt a mix of strategies for their livelihoods are characterized by much more heterogeneity and so are their vulnerability contexts. While floods are likely to hit mainly those settled on the riverbanks, crop failures owing to a number of reasons would hit virtually every one. However, the weak ones would suffer most from the phenomenon. The vulnerability contexts of the elderly and children who, for one or other reasons, cannot take part in seasonal migration are very sentimental in that they are forced to pass a very miserable life in the absence of approachable alternatives. Likewise the trans-boundary traders face several risks ranging from loss of their pack animals to extortion.

The non-first sons are prone to vulnerability to a large extent given that the polyandry system which would have bound them under a single family have been gradually receding and they may be left on their own particularly if the elders in the family fail to support them. The situations of *Ngyalmo* and *Ngyalus* tend to be worse. This is owing to the reasons that they are neither entitled parental property nor do they get social respects. *Ngyalmos* are even more vulnerable than *Ngyalus* owing to their sex disadvantage over the latter. *Jhumas* tend to be vulnerable who are expected to sacrifice their lives in the name of deity but without a proper place where they could learn and get a shelter.

The well-intended current interventions were not able to adequately address to the vulnerability situations of specific groups. It may however be stressed that any development interventions are incomplete unless it is able to address the vulnerability situations particularly of the weaker segments.

We prefer to conclude the paper by citing a quotation from Mahler 1992.

"People may talk about bio-diversity, endangered species etc., but as long as humans are the first endangered species and until ways of ensuring their basic needs [are found], all other efforts take second place"

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