

## **Rural Livelihoods in Nepal: A Case of Mustang District**

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### **INTRODUCTION**

This paper examines livelihood diversification as a survival strategy for rural households in one of the remotest districts of Nepal. The paper first provides a brief exposition of the livelihood approach. Second it examines livelihood assets and livelihood diversification as a survival strategy for people residing in an economically deprived area. In so doing, it brings to the fore the importance of untapped tourism potential in the area as a vehicle for mountain development. The paper concludes that mountain farming on its own is unable to provide a sufficient means of survival unless critical livelihood options based on comparative advantages of an area are not placed at the centre of development. Finally, it provides policy options for addressing diverse rural livelihoods essential for transition from diversification to specialisation.

### **Mustang District**

Mustang district lies between 3,300 and 6,480 masl and borders the Tibetan Autonomous Region (TAR) of China to the north. Among the 75 districts of Nepal, Mustang district is among the most inaccessible, least populated, and underdeveloped. It lies north of the Himalayan ranges of Annapurna (8,091m) and Dhaulagiri (8,167m), which overhang on the east and west the Kali Gandaki Gorge, believed to be the deepest in the world. The district, with a total area of 2,300 sq. km., consists of 16 Village Development Committees (VDCs) and can be geographically divided into two parts, namely, Upper and Lower Mustang. Upper Mustang consists of seven VDCs, namely, Chhonhup, Chhosher, Lo Manthang, Surkhang, Charang, Ghami, and Chhusang. Lo Manthang VDC is the traditional hub of Upper Mustang and also the ancient capital of Mustang. It is located 84 km north of Jomsom, the current headquarters of Mustang district. This paper is concerned with Upper Mustang only.

The entire landscape of Upper Mustang is that of a high altitude cold desert, and most of the land surface lacks vegetative cover. Snow, wind, and sun act on the sandy soils to cause erosion. Agricultural activities are limited by land availability and the short growing season. Most of Mustang remains under snow for four to five months a year and rainfall (April and October) is sparse. Due to low rainfall, the natural forest is stunted and much of the vegetation is bushy. The temperature ranges between four degrees below zero to 14 degrees Celsius. Fuelwood is extremely difficult to obtain. People uproot bushes to meet firewood needs and alternative energy sources are unavailable. Many people travel long distances to collect firewood and spend an equal time returning.

The purpose of this paper is to provide a general assessment of the livelihood status of households in Upper Mustang district. Information on Upper Mustang is scant and not easily available, and the paper draws information primarily from the 2001 Population Census of Nepal. Where relevant, information is provided for Upper Mustang, Mustang District, and Nepal in order to compare where Upper Mustang stands in terms of the overall district and national situations. Information from other secondary sources is also used where available. Following the introductory section, the second section describes briefly the Sustainable Livelihood Framework (SLF). In section 3 the different livelihood assets are discussed followed by livelihood diversity in section 4. The last section discusses the implications on sustainable livelihoods in Upper Mustang.

### **Approach to sustainable livelihoods' analysis**

Generally, sustainable livelihood analysis relies on household level socioeconomic and related information. Such information is not available in the context of Upper Mustang, and hence the livelihood analysis has been carried out using the information available at the Village Development Committee (VDC) level. A livelihood is comprised of the capabilities, assets, and activities required for a means of living. Livelihoods are said to be sustainable when people can cope with and recover from stress and shocks and maintain or enhance their capabilities and assets both now and in the future, without undermining environmental resources (Carney 1998; Scoones 1998; Chambers and Conway 1992).

The Sustainable Livelihood Framework (SLF) starts by classifying assets owned, controlled, claimed, or accessed by households, and which the household uses to undertake production, engage in labour markets, and participate in marketing for exchange. Assets are stocks of capital from which households generate the means of survival or to sustain material well-being.

The five types of assets<sup>1</sup> generally discussed in the SLF literature are human capital (education, skills, and health), social capital (social networks, membership of groups, relationships of trust, access to wider institutions), physical capital (infrastructure such as transport, shelter, farm equipment, energy, and communications), financial capital (income, savings, supplies of credit, regular remittances, or pensions) and natural capital (land, water, biological resources).

The SLF is based on six core principles: it focuses on a people-centred approach, is responsive and participatory, builds on people's strengths, is holistic, addresses micro-macro-linkages, and focuses on partnership and sustainability dimensions (economic, institutional, social, and environmental). Both the access to assets and their uses are governed by policy and institutions and by exogenous trends (e.g., economic trends) and shocks (drought, disease, floods, pests). Households adopt or adapt to different livelihood strategies depending upon the status of their assets, social factors, and exogenous trends or shocks. The strategies are composed of activities that generate the means of survival. Rural livelihood diversification is defined as 'the process by which households construct a diverse portfolio of activities and social support capabilities for survival and in order to improve their standard of living' (Ellis 1998). Rural households engage in diverse activities reflecting the reliance on multiple sources of livelihood to minimise risks associated with any one strategy.

### **Household livelihood assets in Upper Mustang**

#### **Human capital**

Mustang district is sparsely populated with a density of four persons per sq.km., which is much lower than the national average (157.3). The population of Upper Mustang (5,395) comprised 36 per cent of the district population (14,981) in 2001. The sex ratio (102.4) is in favour of males in Upper Mustang and compares with 120.28 for the whole district<sup>2</sup>. The national average is 99.8. Across the VDCs of Upper Mustang there is considerable variation in the sex ratio (Table 1). The economically active population of Upper Mustang is about 75%. There are more males who are economically active (80%) than females (71%). However, some VDCs have a larger population of economically active women than men (Table 2).

<sup>1</sup> Hereafter, the term asset is interchangeably used unless stated otherwise.

<sup>2</sup> Sex ratio is defined as the number of males per 100 females and Mustang has the highest sex ratio among the 75 districts of Nepal.

**Education:** The literacy rate for the population aged six years and above is about 33% and is below the national literacy rate of 54.1%. Male and female literacy rates are respectively 43 and 23% , reflecting an almost 50% gender gap in literacy and compares with a 28% gap at the national level. In Upper Mustang, only one third of the population is literate. The literacy rate however varies considerably across the seven VDCs of Upper Mustang, with Chhusang having the highest literacy rate (42%) and Ghami (24%) the lowest (Table 3). The percentage of children above six years who are currently attending school in Upper Mustang is 46% with Charang having the highest attendance rate (64%) and Ghami (34%) the lowest. The percentage of male children (53%) attending school is higher than female children (37%) in Upper Mustang. The attendance rate for males is higher than for females in all VDCs except for Charang, Chusang, and Sukrang where the opposite prevails.

There are 90 schools in the district and, given the sparse population, the district has 5.14 schools per 1000 population and is one of the highest in the country and second only to Manang (6.85). The teacher school ratio in Mustang (4.21) is higher than the national average (3.8). The girls' enrollment rate at all levels of school in Mustang (49.9%) is also higher than the national average (43.33%). In Mustang district as a whole, the population that had completed primary education comprised about 45%, those that had completed lower secondary and secondary about 25%, school and equivalent 9%, certificate and above 7%, and those that had never had schooling about 14%. Such information is not available at the VDC level to assess the situation in Upper Mustang, but the position relative to Nepal as a whole is given in Table 4.

**Health:** The infant mortality rate is above 88% and 63% of children (under 5 years of age) suffer from chronic malnutrition (stunting) in the district. In Mustang district, about 84% of the households have access to a tap or piped water, while the national average is about 53%. Access to toilet facilities is also an indicator of health as it reflects the availability of a first line of defense against certain types of diseases. In Mustang about 59% of the households do not have toilets. There are many other districts in Nepal where the percentage of households not having toilets is even higher. Although access to health facilities as measured by the number of health institutions per 1000 population in Mustang (1.13) is relatively better than that for an average Nepali (0.18), the quality of the health delivery system from the existing government organisations in the district is poor. This is evident from the relatively higher incidence of ARI (238) and diarrhoea (238) per 1000 children below five years in the district over the national average (Table 5).

## **Social capital**

Social capital is the basic building block of all forms of capital. Upper Mustang has its own indigenous forms of social networks and institutions governed by deep-rooted social and cultural norms. Buddhism and Tibetan culture influence the society of Upper Mustang. The social structure consists of social and caste divisions and kinship relations. Gurungs<sup>3</sup> constitute the predominant ethnic group in terms of population, although Bistas are traditionally the ruling class in the area. The major class division is between the aristocrats ('kudhakpa') and the commoners (subjects/'misher-bhija'). 'Kudhakpa' symbolises the king's and other noble families and these are mostly from the Bista caste<sup>4</sup>. The commoners play a key role in the economy—in agriculture, trade, and animal husbandry—and account for more than 80% of the population. The caste system determines rules of marriage and purity and continues to be strong even to the present day. Marriage rules are regulated by kinship and caste. Polyandry is still in practice to avoid the splitting of the family farmland (parental property) (Rai 1987).

*Traditional/indigenous organisations:* The Loba political organisation is represented by three institutions; namely, the Raja, the traditional village organisation, and the monastery and lies outside the formal structure of the Nepal government. These three institutions maintain social order among the Lobas and have their own rules, which it is argued are biased against the lower socioeconomic groups (Box 1). Upper Mustang is also rich in cultural assets (Box 2).

*Government and other organisations:* the Village Development Committee (VDC), agricultural services' centre, livestock services' centre, health posts, Nepal Food Corporation (NFC), post office, telecommunication office, and police post are among the government institutions located in Lo Manthang which provide some level of service to the people.

Indigenous social networks and institutions (social capital) are reinforced by the institutional building component of the Annapurna Conservation Area Project/Upper Mustang Biodiversity Conservation Project (ACAP/UMBCP) being implemented by the King Mahendra Trust for Nature Conservation (KMNTC) in Upper Mustang. The UMBCP has established an eight member Conservation Resource Action Committee (CRAC) under the chairmanship of the Raja of Upper Mustang. The CRAC consists of

<sup>3</sup> The Gurungs of Upper Mustang may also in fact be of Bhotia origin

<sup>4</sup> The aristocrats are divided into three categories namely: Loba royal family, nobles, and quasi nobles. Each individual in the aristocrat group is ranked based on genealogical ties with Tibetan families. See Rai 1987 for more details.

### **Box-1: The three institutions in Upper Mustang**

The local Raja is still a powerful institution in Upper Mustang. All Loba citizens are expected to abide by the rules and regulations of the palace. The palace owns large tracts of land and also sells land to the local people. The commoners till the palace lands. The palace produces surplus food, which is loaned out at an interest rate to food deficit households. Traditionally, the King can impose a social sanction of 'Chhepa' on anyone who does not abide by his rulings. Over time political changes in Nepal and Tibet have also affected the powers of the Raja.

The *Traditional Village Organisation (TVO)* acts as an intermediary between the people and the palace and in the past has taken a stand against the Raja's decisions. Members representing it are from aristocrat (15 families) and commoner (125 families) families. The headman is selected from the aristocratic families and two spokespersons, an accountant, and four lieutenants, constitute the council. In each village, a 'mukhiya', village chief, is elected normally for one year and is responsible for overall development activities and is highly regarded. The TVO levies fines and penalties for the violation of rules and the money collected is deposited in village funds.

The *Monastery* exercises jurisdiction over religious affairs. It owns large tracts of agricultural land and produces surplus food. This food is loaned out at interest. It leases out land to families whose sons or daughters are either monks or nuns in the monastery. It is mandatory for all households with more than three sons to send one son to be a monk. Usually the second child is sent. The monks provide spiritual and religious leadership and influence decisions involving moral and ethical codes.

two representatives of the seven from the Upper Mustang Conservation Area Management Committee and nominees appointed by the Raja, a women's representative, the District Development Committee (DDC) chairman, the local development officer, and the national programme manager of the UMBCP. A community resource action joint sub committee (CRAJSC) board has been formed to manage the community trust fund. The board consists of 13 members of which four (chairman, vice chairman, secretary, and treasurer) are selected by mutual consensus of the members and the remaining members are selected based on representation from the women's group, the local intellectual community,

### **Box-2: Historical and cultural assets**

**Monasteries:** The three monasteries of Jhampa Gomba, Thuhchen, and the Ngonga-Tangchubung Monthang Choedhe inside the walled city are managed by monks and the local community.

**Longest Prayer Wheel Wall:** Upper Mustang also boasts one of the longest rows of prayer wheels in Nepal, and it is located in Ghami VDC.

**Chooser Cave:** Among the numerous caves found in this area, one cave is five storeys high and consists of about 85 rooms. It is said that the people of Lo inhabited the caves in ancient times.

**Lo Manthang Wall:** Built in the 15th century by the Mustang King, Ama-dopal, the wall surrounding the White Fort City, is another cultural heritage of the people of Lo Manthang.

**Fort Towers:** Built to watch enemy attacks from Tibet, two dilapidated forts stand just north of Lo Manthang from where the Tibetan plateau can be clearly seen.

**Yartung:** This is a harvest or horse festival that takes place on the 15th of the seventh month of the lunar calendar.

the backward community, and the VDC. There are altogether 31 mothers' groups and 20 savings' and credit groups formed in Upper Mustang. The formation of such local organisations though social mobilisation is believed to provide a common platform for people to discuss and raise their voices and choices.

### **Financial capital**

Financial capital refers in particular to income, savings, supplies of credit, regular remittances, or pensions. Lack of information does not permit assessment of the status of financial assets in Upper Mustang. The UMBCP has the provision for a Community Trust Fund (CFT) to support biodiversity conservation in the region and promote income generation activities. This fund is channelled through the community resource action joint committee to savings' and credit groups, which then disburse the loan to the community group and individuals. The idea is to create a community revolving fund so as to fund a variety of activities. However, the mechanism for the use of this trust fund has not been made clear

(Rayamajhi et.al. 2002). Further, the tourism revenue ploughed back by the government is critical for long-term sustainability of this fund and implementation of the tourism management plan. A final decision on the plough back mechanism has been pending now and the fund committed to savings<sup>5</sup> and credit groups prior to the formation has not been realised.

### **Physical capital**

Mustang is severely deprived of physical assets and is among the few districts in Nepal that does not have a motorable road. A road is under construction, connecting Lomanthang with Tibet. There are two airports in the district, one in Jomsom and the other in Chooser. There is a telephone service in the district and the coverage is 2.5 lines per 1000 population, which is much lower than the national average of 12.5 lines per 1000 population (Table 6). Radio sets are owned by 54% of the households. About 53% of the households in the district have access to electricity provided by a micro-hydro power plant (29 kW). Electricity is used mostly for lighting purposes. Local people continue to rely on the little vegetation that is available to meet their firewood needs for cooking and space heating. Firewood is very scarce and people are forced to rely heavily on animal dung. The latest population census data indicate that about 63% of households in Mustang rely on firewood, another 25% on animal dung, and the rest on kerosene for cooking. An average household burns about 40kg of animal dung per day. This diversion of dung from farm to fireplace has implications on soil fertility and agricultural productivity. Through ACAP support, kerosene depots have been established in Upper Mustang. Kerosene is unaffordable for the large majority of the local people due to its price which is three to four times higher than the price in Pokhara, reflecting the exorbitant transportation costs.

### **Natural capital**

Upper Mustang is unique because of its trans-Himalayan setting. The sheer beauty of this cold natural wilderness desert north of the majestic Himalayas is in itself an important tourist asset. Its unique environment has limited substitutes with high option value<sup>5</sup>. Remoteness and the restricted status of the area (to foreigners) until a few years ago are also important factors that attract tourists. Upper Mustang has distinct faunal species; mostly Tibetan species, and some are already listed as either rare or endangered by the Department of National Parks and Wildlife Conservation (DNPWC). Some disturbed wildlife is beginning to reappear

<sup>5</sup> An environment confers benefits on users and those who, while not using it directly, are glad that it is there.

due to conservation efforts. Endangered species, namely, wild yak (*Bos grunniens*), Tibetan wild ass (*Equus hemionus kiang*), and the nayan or great Tibetan sheep (*Ovis ammon hodgsoni*) have also been reported but have not been authenticated. The area around the Damodar Kunda (a pilgrimage site for Hindus) has almost pristine forests and harbours many rare wildlife species. Livestock depredation by wildlife is reported to be high, especially during the summer months when herds are taken to the high altitude meadows for grazing.

### **Livelihood diversification**

Households in Mustang have to rely on limited assets to carve out their subsistence livelihoods. To cope with the harsh weather conditions and limited assets, households in Mustang have, over the centuries, diversified their economic activities. The nature of assets and the harsh climatic conditions constrain many activities to be pursued except as limited activities. Although information is not available on the economic returns to households from the various activities, they are believed to be low. Farming, supplemented by animal husbandry and trade and migration, are the main economic activities of the people of Mustang. These activities follow an annual cyclical pattern dictated by the climate of the area. Labour shortage is reported during the peak agricultural season, especially during harvest time (Ojha 1986). The advent of controlled tourism in Upper Mustang in 1992 complemented these traditional activities. Some families also make an income from tourism (lodges, camping sites, and curio shops). Tourism potentials are high but the present practice does not permit the locals to benefit from it.

### **Farming**

According to the 1991 Agricultural Sample Census, the total area under agriculture in Mustang district was 1,183 ha, and this was distributed over 8,525 parcels. According to the latest census data the size of average landholding in the district is less than 0.5 ha per household and its distribution is highly skewed (0.47 gini coefficient). The total number of landless households account for 26% of the district and marginal households who own less than 0.2 ha (about 20%). The royal family holds the largest proportion of land.

Agricultural activities begin after the snow melts in March-April and all agricultural activities come to a halt in October after the harvest. Most of the people of Upper Mustang generally grow only one cereal crop in a year on a rotational basis. Wheat, naked barley, buckwheat, peas, mustard, and a very limited amount of maize are the major crops. Due

to variations in altitude, crops mature on different dates. Productivity is poor due to a variety of factors, including the poor quality of soil and lack of adequate manure and improved seeds (Table 7). Water for irrigation is not assured and depends on weather conditions. Seeds are broadcast and many do not even germinate. Apples, apricots, radishes, potatoes, and green vegetables have been introduced only recently. Many households are unable to produce adequate food to meet their needs and have therefore been forced to diversify economic activities to cope with the hardship faced. Animal husbandry is another important activity of the households in Mustang.

### **Animal Husbandry**

Animal husbandry is another major source of livelihood for the Upper Mustang people, providing nutritive foods, dung for both agricultural fields and cooking, transport, and cash income. In contrast to the small human population, Mustang has a large livestock population consisting of cattle, sheep, goats, yaks, and pack animals (horses, mules, donkeys, and 'dzopa') (Table 8). Yaks are the most valued livestock, followed by sheep and goats. Animal husbandry is an integral part of agriculture. About 55% of households in Upper Mustang have both land and livestock with considerable variation in the proportion of such households across seven VDCs (Table 9)

Livestock are continuously moved from one pasture to another depending on the availability of grass. Yaks graze on the high altitude pastures. Sheep are grazed only in summer on pastures located in the south. Horses are generally stall fed and taken to pastures occasionally. Over time the size of yak herds has been decreasing and, hence, the income from yaks. In the past pastures in Tibet were the main source of grazing for livestock, but this facility has been significantly curtailed by China in recent years. Local pastures have degraded significantly due to overgrazing by livestock. About 300-600 ha of rangeland are estimated to become depleted annually in Upper Mustang due to poor pasture management (Raut 2001). There is no institutional regulation of public pastures in any of the settlements. However, community ownership of pastures is highly regarded. Without permission, members of one community do not use pastures belonging to other communities. Inbreeding is also a serious problem and has caused productivity to fall among many livestock.

### **Trade and migration**

According to the 2001 population census, nearly 75% of the households are engaged in trade/ business (25.3%) and services (59.5%) in Upper

Mustang (Table 10). Small-scale non-agricultural economic activities are operated by the households in all the VDCs of Upper Mustang despite some variations across the VDCs. The Kali Gandaki trail served as a major trade route in the past, connecting Tibet with India. Although the north-south trade was an important activity to the people in the past, its importance declined significantly from the late sixties. The Thakalis were the most important traders, but the Upper Mustang people benefited from transporting traded goods. Trade contributed significantly to the growth of Upper Mustang in the past. Trade between this area and Tibet continues even to this day, but its magnitude has declined substantially.

Seasonal migration is an important livelihood strategy for the people of Mustang. During the harsh winters between a half to two-thirds of the people, or on average one member per household of Lo Manthang, migrate down to Pokhara, Kathmandu, or to India for approximately three months. They normally engage themselves in door-to-door trade. Different types of herbs, 'churpi' (dried cheese), and other locally-produced cottage industry products are taken by the migrants to sell in the south. Cash obtained from trade is used to purchase small manufactured items, which are then sold in different villages in the south during the period of migration. Some engage in retail trade as roadside vendors. With the cash earned from trade people return with food grains and other manufactured items, some of which they may sell across the border in Tibet. From Tibet they bring back salt, wool, and other livestock products for home consumption.

### **Tourism**

Mustang is one of the last frontiers of a Himalayan enclave that has changed very little for centuries, and its remoteness, landscape, and sociocultural assets serve as a rich tourism resource. Owing to its unique religion and culture, fragile environment, remoteness, and restricted status until a few years ago, this area has always been veiled by an aura of mystery. The area is equally rich in both cultural and biodiversity assets.

Realising that development in terms of agriculture and other modern sectors in Upper Mustang is limited, the government of Nepal decided to promote controlled and high-paying tourism in the area. Controlled tourism, which began in 1992, is restricted to a maximum of 1,000 visitors per annum who pay US\$ 70 per head per day for a minimum of 10 days; enter the area in a group of at least two persons; are facilitated by an officially registered trekking company; are self-sufficient in terms of food and fuel; and are accompanied by a liaison officer. Although the

government agreed that part of the revenue accruing from tourism would be channelled for development purposes through the King Mahendra Trust for Nature Conservation (KMTNC), in reality this has not materialised as desired. During the past several years, only about three to four per cent of the total revenue (as against the 30-50% committed) collected from tourists has been ploughed back to KMTNC for development work in Upper Mustang (KMTNC 2003). In addition, only group tourists are permitted to visit the area. Group trekkers come on a scheduled trip, which is organised by a travel company. The full services, or inclusive package, include all camp equipment such as sleeping bags, dining and toilet tents, cooking gear, three meals a day, guides, cooks, and porters. Group trekkers, being self sufficient, can travel into wilderness areas and away from villages as long as there is water and a place to pitch tents. However, this type of trekking does not permit local people to benefit from tourism. While there is scope for promoting livelihood opportunities through tourism, both factors—inadequate ploughing back of tourism revenue and group tourism—are severely undermining the scope tourism can play in diversifying and promoting livelihoods in Upper Mustang.

### **Development interventions in Mustang**

The major development intervention in Upper Mustang is the Upper Mustang Biodiversity Conservation Project (UMBCP). The UMBCP is executed by KMTNC with financial support from the Global Environment Facility (GEF), United Nations Development Programme (UNDP), American Heritage Foundation(AHF), and the International Centre for Integrated Mountain Development (ICIMOD). It is a 5-year project ending in 2005<sup>6</sup>. The project covers all seven VDCs of Upper Mustang. The main aim of the project is to restore Upper Mustang's ecology and economy by linking the two major livelihood assets—biodiversity (natural) and cultural heritage (social)—with tourism management. The project aims to achieve its goals by institutional capacity building, biodiversity database development for community-based planning, management, and monitoring and replicable income-generating schemes that contribute to biodiversity conservation.

The mid-term evaluation of this project has pointed out several issues to be addressed to achieve the goal of the project. On gender issues, the policy documents, CAMR 2056 and bye-law 2053, are almost silent about the role and capabilities of women, involvement of marginalised people, and their empowerment. At the project level, women and lower caste (so called) representation in the existing Conservation Area Management

<sup>6</sup> The mid-term review (MTR) recommended that the project be extended until December 2006.

Committees (CAMCs) is very low (only 18 female members and 2 lower caste people). At community level women work longer hours (15 hours) than men (11 hours) and women have greater work loads than men. The polyandry system practised in Upper Mustang gives a central role to the woman in overall household management. The eldest husband is generally counted as the head of the household, implying that women have access to resources but not control of them. Women are not entitled to land ownership. Women's participation in decision-making processes related to traditional, cultural, and political activities is very low. Although women participate in community meetings they rarely make decisions (Gurung 2001).

### **Key issues and implications for livelihoods**

Under the current state of subsistence agriculture and infrastructure, Upper Mustang experiences a growing conflict between short run survival needs for food and energy and long run livelihood and environmental sustainability. This problem stems largely from an overall problem of underdevelopment and lack of appreciation of the environmental resources. Caught between poverty of assets, rural households are forced to diversify their portfolio of activities to sustain their livelihoods in the face of adverse trends or sudden shocks and substitution between opportunities that are in decline and those that are expanding. While the low level of human capabilities limits the scope for substitution between capitals, economic hardship and poverty force many people to adopt both short-term (coping) and long-term (adaptation) survival strategies. Several implications emerge, however, from the foregoing situational analysis of rural livelihoods in Upper Mustang. Highlighted below are some critical issues and options related to tourism, animal husbandry, and trade as the key sources of livelihood diversification.

### **Tourism as a critical option for livelihood diversification**

As Upper Mustang has a comparative advantage in tourism development and the scope for other development activities is fairly limited, tourism development must be the lead sector of development in the area. Since high paying and controlled tourism has already been introduced, the vision should be to establish Upper Mustang as premium destination by providing visitors with a high quality experience while at the same time ensuring that the wider community benefits from tourism directly or indirectly. Unless tourism development in the area can be made a vehicle of overall development, the prime tourism assets will deteriorate and will gradually erode the comparative advantage the area enjoys in terms of tourism (Banskota and Sharma 1998). Tourism itself can have

negative impacts if not properly managed and this can accelerate the asset deterioration process, so critical for any strategy for livelihood diversification<sup>7</sup>. Proper planning and management of tourism in Upper Mustang is therefore essential for both the destination and site levels to maintain their integrity and to ensure that the unique attractions are conserved to provide the visitors and host population with a quality experience and improve the quality of life of the local people.

However, tourism started in Mustang without any proper planning and interrelated development of the supply components of tourism that establish cross-sectoral production linkages with the local economy. Current group tourism practice is not permitting local people to benefit from tourism either directly or indirectly. Since the trekking industry in Kathmandu has monopolised the trade and guides, porters and horsemen are recruited outside the area in Jomsom; and the only immediate returns, and those too are limited to a few local people, are those made from renting out camping sites, some horse driving, and from the sale of a few souvenirs. This has created a situation in which the rising expectations of local people from tourism have remained unfulfilled, leading to disenchantment and frustration.

Under the current restricted group tourism practice, the provision for ploughing back revenue generated from tourism is a major source of income to be made available to support local development and conservation activities. However, the experience with HMGN's funding of Upper Mustang operations up-to-date make it highly unlikely that substantial funding will be made available to allow local institutions (i.e., CAMCs) to fund development and conservation activities for the benefit of local people. There is also a latent conflict between the DDC and KMTNC over the question of who should be in control of tourist revenue. This is because the Conservation Area Management Regulation (CAMR) 2053 (1996) and the Local Self-Governance Act 2055 (1998) have led to a double governance structure within Conservation Areas—consisting of both local government bodies and conservation area institutions leading to a competition between the DDCs, VDCs, and KMTNC with regard to the sharing of Upper Mustang tourism revenues<sup>8</sup>. Furthermore, the main organisation responsible for coordinating all the development activities

<sup>7</sup> See Banskota and Sharma (1995) for a detailed discussion of the impacts of mountain tourism.

<sup>8</sup> While the National Parks and Wildlife Conservation Act 2029 (1973) and the Conservation Area Management Regulation 2053 (1996) give the Conservation Area Management authorities the right to use 30-50% for local community development, the Local Self-Governance Act 2055 (1989) gives the District Authorities the right to 30% of all tourism revenues in order to fund local development activities.

within Upper Mustang has not been well defined given the ambiguous mandate between KMTNC and DNPWC<sup>9</sup>.

Upper Mustang may be geographically isolated, but its people are not. Many people are forced to diversify their incomes by engagement in trade activities in the winter season in places such as Pokhara, Kathmandu, and India. The implication of such diversification as a survival strategy in the recent globalisation context is clear. Controlled tourism cannot be sustained under the current management practice and poor record of recycling back of tourism-generated income for supporting local development and conservation activities. A rough road that now extends southward (Lo-Manthang) from the Tibetan border at Korolla is rapidly opening up the area and traded goods and livestock from China are being brought in. Considering the growing demand of local people, a joint VDC and DDC initiative should be undertaken for further road construction. The fact that the Chinese have expressed an interest in constructing the Beni-Jomsom section makes road development all the more likely. Despite its positive impact on trade diversification, road development will inevitably lead to de-restriction of the Upper Mustang area. Moreover, the way in which the large sum of tourism revenue is retained by the Central Government will ultimately lead to disenchantment among the local people forcing them to do away with the qualification of Upper Mustang as a Restricted Trekking Area.

### **To be noted**

The implication of de-restriction of Upper Mustang on rural livelihoods suggests allowing local people to make a living from tourism directly rather than depending on the Central Government to provide funding. This implies a significant reduction in permit fees, a change in trekking rules to allow trekkers to purchase local food and lodging, and a gradual increase in the number of trekkers passing through the area. Such a policy will have an impact on the landscape and villages of Upper Mustang, increase the waste problem, and intensify the fuel issue. Realising that the opening up and de-restriction of the area will eventually be inevitable, there is an urgent need to discuss and prepare a long-term management plan through a participatory stakeholder consultation process to address what Upper Mustang should look like in, say, 2012 when KMTNC's mandate expires. Sustainability in the context of Upper Mustang thus

<sup>9</sup> The Department of National Parks and Wildlife Conservation (DNPWC) has full authority within the protected area. In contrast to the Department, KMTNC, being an NGO, is not fully authorised to strictly enforce rules and regulations within the protected area and development projects and licenses are issued by various organs of the Government without the knowledge of KMTNC.

requires that tourism development has to receive more attention than it has currently received, as no other alternatives but tourism appear to hold a key to development of this area.

### Pasture management for sustaining animal husbandry

The poor quality of pasturelands and the lack of other sources for fodder do not make livestock raising very viable under the present circumstances. With the closure of the Tibetan border, grazing in upper Mustang has intensified. Grass is becoming more expensive than apples, indicating the growing scarcity of fodder in the area. Pasturelands are mostly degraded and are dominated by shrubs (used as firewood). Already fodder shortages have forced people to reduce their herd sizes. But this has also led to a reduced supply of dung for fuel and hence greater time being spent for gathering alternative fuel sources. The grazing system—both rotational and deferred—is one effective tool for rangeland management and such a practice could bring a positive impact on the rangeland condition in Upper Mustang. Pasture management and grass seed production should be given priority, but in the long run biomass production would become the primary benefit.

### Finding a sensible solution to the existing energy crisis

A long-term solution to the energy problem in Upper Mustang remains another challenge for improving rural livelihoods. The severe scarcity of firewood has forced people to rely heavily on animal dung as fuel with grave implications for agricultural productivity. Scope to increase the supply of traditional fuel, i.e., biomass, through plantation and improved management, appears to be limited. Possibilities to develop alternative energy, particularly micro-hydro, are there but its use is likely to be limited to lighting only. Solar energy is being tried out, but it will take some time before this alternative technology can be turned into practice in the area. Improving energy use efficiency through energy efficient technologies should be given prime consideration. Detailed investigation is thus needed to find the viable alternatives and divert the existing energy crisis.

Table 1: Population distribution, household size and sex ratio in Upper Mustang

	Population			Sex ratio (M/F*100)	Household population	Household size
	Male	Female	Total			
Charang	327	334	661	97.9	142	4.65
Chhonhup	536	534	1070	100.4	197	5.43
Chhoser	390	393	783	99.2	174	4.50
Chhusang	332	336	668	98.8	186	3.59
Ghami	424	426	850	99.5	178	4.78
Lo Manthang	480	368	848	130.4	180	4.71
Surkhang	241	274	515	88.0	114	4.52
Upper Mustang	2730	2665	5395	102.4	1171	4.61

Source: CBS 2002

Table 2: Population 10 years and above by usual economic activity in Upper Mustang

	Population 10 years and above			Usually Economically Active			% Usually Economically Active		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Charang	535	278	257	367	199	168	68.60	71.58	65.37
Chhonhup	814	412	402	683	335	348	83.91	81.31	86.57
Chhoser	626	306	320	507	250	257	80.99	81.70	80.31
Chhusang	550	273	277	340	234	106	61.82	85.71	38.27
Ghami	661	325	336	496	273	223	75.04	84.00	66.37
Lo Manthang	710	411	299	538	303	235	75.77	73.72	78.60
Surkhang	390	189	201	311	162	149	79.74	85.71	74.13
Upper Mustang	4286	2194	2092	3242	1756	1486	75.64	80.04	71.03

Source: CBS 2002

Table 3: Literacy of population aged 6 years and above in Upper Mustang

	Literacy rate			% Currently attending school		
	T	M	F	T	M	F
Charang	35.04	41.16	28.87	64.44	68.63	70.09
Chhohhup	31.76	44.74	19.22	38.07	42.19	40.96
Chhoser	38.87	51.47	26.70	56.31	65.47	63.36
Chhusang	42.33	50.00	34.87	53.88	55.17	61.76
Ghami	24.48	35.38	14.09	34.29	37.78	34.88
Lo Manthang	28.72	35.84	19.46	57.73	63.10	55.40
Surkhang	31.10	40.58	22.92	38.95	34.57	46.46
Upper Mustang	32.87	42.50	23.16	46.09	52.54	37.34

Source: CBS 2002

Table 4: Relative position of Mustang in some education related livelihood indicators

Education	Rank	Mustang	Nepal
Primary school net enrollment ratio	1	98.2	81.10%
Ratio of girls to boys in primary education	4	102.8	81.10%
Student teacher ratio in secondary education	1	5.6	23.8
Literacy rate of population 15-24 years	30	74.6	70.1
Ratio of literate females to literate males 15-24 years	17	86.3	74.6

Source: CBS, 2003

Table 5: Relative position of Mustang in some health related livelihood indicators

Health	Rank	Mustang	Nepal
Access to improved source of drinking water	28	84.5	82.00%
Access to toilet facility	40	40.8	46.8
Incidence of ARI per 1000 children < 5 years	66	335	229
Incidence of diarrhoea per 1000 children < 5 years	60	238	177
Proportion of malnourished children under 3 years	2	5.7	15.8
Reported deaths per 1,000 population	52	5.575	4.81988

Source: CBS, 2003

Table 6: Relative position of Mustang in some physical infrastructure/assets

Physical Assets	Rank	Mustang	Nepal
Proportion of households having electricity facility	11	53.3	39.80%
Proportion of households using solid fuels for cooking	33	89	76.90%
Proportion of households having radio facility	38	54	53.10%
Telephone lines per thousand population	31	2.54	12.5
Road density (length/sq.km. Area)	68	0	0.11438

Source: CBS, 2003

Table 7: Relative position of Mustang in yield rate of some crops

	Rank	Mustang	Nepal
Yield of vegetables (kg per ha)	41	9725	10792
Yield of fruits (kg per ha)	55	8878	9514
Yield of cash crops (kg per ha)	37	7442	9465
Yield of cereal crops (kg per ha)	53	1607	2199
Yield of pulses (kg per ha)	59	660	815

Source: CBS, 2003

Table 8: Livestock population by type in Upper Mustang

	Yak	Dzopa	Ox+Cow	Donkey	Mule	Goat	Sheep	Horse	
Chhohhup	671	103	481	9	0	1807	997	411	4479
Chhoser	0	9	389	72	0	5237	2015	254	7976
Chhuksang	0	296	351	0	181	3261	8	151	4248
Ghami	168	262	580	7	17	3004	0	324	4362
Lomanthang	211	8	432	76	3	1477	241	444	2892
Surkhang	233	74	215	0	0	7172	53	151	7898
Tsarang	102	153	493	8	0	2428	1	285	3470
UM Total	1385	905	2941	172	201	24386	3315	2020	35325

Source: KMTNC/ACAP/UMBCP, Livestock Survey 2001

Table 9: Households having agricultural land and livestock in Upper Mustang

	Total HH	Agricultural land only	Livestock only	Land and livestock	None at all
Charang	142	7.75	0.00	66.90	12.68
Chhonhup	197	5.58	1.02	76.65	5.08
Chhoser	174	6.90	1.15	75.86	9.77
Chousing	186	2.69	1.61	9.14	18.28
Ghami	178	2.81	2.25	57.30	12.36
Lo Manthang	180	11.11	6.11	60.56	17.22
Surkhang	114	8.77	0.88	33.33	18.42
Upper Mustang	1171	6.32	1.96	55.00	13.07
Mustang	3242	8.76	1.23	29.09	22.98

Source: CBS, 2002

Table 10: Households operating small-scale economic activities by type

	Total HH	Not having economic activities	Having economic activities	% Operating economic activities	% Manufacturing	% Trade/Business	% Transport	% Service	% Others
Charang	142	140	2	1.41	0.00	50.00	0.00	0.00	50.00
Chhonhup	197	100	97	49.24	4.12	22.68	0.00	73.20	0.00
Chhoser	174	98	76	43.68	0.00	6.58	0.00	93.42	0.00
Chhusang	186	135	51	27.42	1.96	27.45	29.41	31.37	9.80
Ghami	178	148	30	16.85	3.33	33.33	0.00	46.67	16.67
Lo Manthang	180	148	32	17.78	3.13	53.13	0.00	12.50	31.25
Surkhang	114	101	13	11.40	0.00	53.85	0.00	23.08	23.08
Upper Mustang	1171	870	301	25.70	2.33	25.25	4.98	59.47	7.97
Mustang	3242	2288	955	29.46	4.50	26.39	5.86	55.18	8.06

Source: CBS, 2002

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## Chapter 7

# **Village-based Development in the High Mountains of Pakistan: Lessons from the Aga Khan Rural Support Programme(AKRSP)**

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### **INTRODUCTION**

This case presents an example of village-based participatory rural development, initiated by the Aga Khan Rural Support Programme (AKRSP) in 1982 in the extreme northern parts of Pakistan, that later became the precursor for an active Rural Support Programme movement in Pakistan and elsewhere. Initially started in the five districts of the Northern Areas and Chitral district of the North West Frontier Province of Pakistan, this participatory rural development model has now been widely replicated across Pakistan and in many countries in Africa and Central Asia. The experiences of AKRSP and those of its replicas share important commonalities in terms of both the approach and the ultimate impact upon the communities. This case is however focused on AKRSP and looks at its experiences as a key rural development agency in the remote and mountainous areas of northern Pakistan.

### **Source of data**

Most of the information for this case comes from the proceedings of an international workshop organised by AKRSP in December 2003 to celebrate its twenty years of experience in rural development. About 10 different thematic papers were produced for this conference to capture the lessons in rural development, and this case study has greatly benefited from those papers. In addition, a recent study entitled 'Scaling up Rural Support Programmes (RSPs) in Pakistan'<sup>1</sup> was another important paper that has fed into this study, particularly the sections on the conceptual model and impact on poverty and livelihoods.

<sup>1</sup> This paper, co-authored by this author, was presented at a global conference on scaling up success in reducing poverty and sustaining growth, Shanghai, 25th- 27th May 2004.