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# Mobile Pastoralism in Crisis: Challenges, Conflicts and Status of Pasture Tenure in Nepal Mountains

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**Abstract:** High altitude areas in general and related mobile pastoralism--transhumance herding system--in particular have been neglected by the policies and actors of Nepal. The blanket policy approach has almost ignored the socio-cultural, economic and ecological aspects of uniquely positioned nexus between the high hill forest ecosystem and the livelihoods of people dependent on them. However, concerns are being raised over the threat to the traditional occupation of the high altitude people. National policy processes have not yet responded to it adequately and in time. By reviewing the existing policies and practices of government and other actors at different levels from the tenure perspective and by collecting primary data from the field using different participatory tools and techniques, the paper explores the issues, challenges and opportunities of mountain pastoralism with focus on the transhumant herding system. The research shows that the shrinking grazing land for mobile pastoralists, newly emerging market trends, increased awareness of high altitude people about education and increasing options for employment outside the area have posed threats to the traditional occupation.

**Keywords:** pastoralism, community forestry, mountain.

## INTRODUCTION

Nepal's forest policies and regulatory frameworks are little responsive to the nature of resources and to the links of these resources to the livelihoods of the people in high altitude areas. Mobile pastoralism, called transhumant herding system, is on the verge of extinction and the people's livelihoods have been curtailed largely because of the neglect by the State policies. In spite of this neglect, the ecosystem-based livelihoods and culture of most of the high altitude people have been complex but harmonious since time immemorial.

The livelihoods in pasture areas are basically the transformation of one form of capital (i.e., the natural) to other forms such as financial and physical. This change in capital raises the concern of property endowments, creating conflicts between different actors. For instance, when livestock predominantly becomes private property, they ranch over a pasture, which is basically a public or government property (Andreev *et al.* 2005). Traditionally, different forms of tenure of these pastures exist in Nepal where certain groups of people claim the rights and benefits exclusively from the resources. In the past, there were customary local institutions for the governance of these resources. The high altitude transhumance, however, is being affected by formal government institutions in the later period.

In the name of enforcement of legal instruments for forest regulation, customary practices and informal institutions are either neglected or are in conflict with formal state-induced institutions.

Due to the climatic and edaphic factors, the area is uniquely spaced, harbouring many endemic but highly valuable resources. This uniqueness of high altitude resources provides a better option for producing a wide range of products and services with specific market niche such as yak cheese, wool, food and medicines. The livelihoods of the people living around meadows and temperate zones in high Himalayas have been supported by the pastureland and high value herbs and Non-timber Forest Products (NTFPs). The scale of pasture in high altitude areas is so big that it possesses about 80% of the country's pastureland, which justifies the potential of livestock-based livelihoods as compared to other regions of Nepal.

The major issue being raised is the failure of national policies to recognize and respond to the uniqueness and intricacies of people-ecosystem relations in high altitude areas. The concerns are related to the government's policy measures and their impact on resource governance, resource condition and livelihoods of the people engaged in transhumant herding practices.

In this article, we discuss the issue from the perspective of tenure security. Tenure security as a central analytical concept brings policy and legal environment, institutions, market and other external factors into a single coherent framework. Tenure arrangements can be understood in terms of pattern of ownership, bundle of rights and sources of those rights. The ownership could be state, collective or individual; the bundle of rights could be the right to use, manage, exclude outsiders, and make rules for governing resources or the right to alienate. Similarly, the sources of these rights could be customary or formal (see Paudel *et al.* in this issue).

This paper explores the historical context of mobile pastoralism and institutions developed around it. This is done by reviewing tenurial development in Nepal, linking it with the wider concepts of rights and resources. The impact of market and other factors, including externalities, are discussed briefly. Viewing policy, community institutions and market trends as key determinants of tenure arrangements around high altitude pasture, the paper sheds some light on the economic, social and ecological viability of transhumant herding-based livelihoods. Some issues, challenges and opportunities are discussed in relation to the perspectives and views of different actors and institutions. Finally, conclusions are drawn and future strategies are suggested to have a more harmonized nature-people links in high mountain areas.

### **PUTTING TRANSHUMANT PASTORALISM IN CONTEXT**

Transhumant pastoralism is the major form of livelihood in Nepal's high altitude region (>2500 metres amsl). About 80% of the country's pasture land (total 1.7 million hectare) falls in this region alone (Miller 1993). The region is characterized by sharp climatic variations, temperate to alpine forests, with predominantly indigenous species, extended shrub lands and pasture, high-value medicinal plants and significant biodiversity, and valuable landscapes, including globally significant flora and fauna. There is high seasonal mobility, particularly for transhumant herding, trade and in search of temporary employment.

The region is sparsely populated, primarily by indigenous ethnic groups such as Sherpa, Bhote, Tamang and Gurung. They broadly belong to the Tibeto-Mongoloid groups and follow Buddhism.

The region is relatively isolated and has little access to market. The people are highly dependent on forests for their livelihood such as construction of houses, grazing, fodder, fuelwood, NTFPs, farm equipment and household utensils. They rely heavily on fuelwood for cooking and warming in cold temperature throughout the year.

Mountain (also called Tibetan) goats, sheep, yak, *chauri* (a hybrid of a yak and local cow),

#### **Box 1 Livestock Population in High Altitude Areas**

An earlier report (Miller 1993) estimated that there are about 56 thousand yaks and yak-cattle hybrids (called locally as *chauri*), 912 thousand sheep, 5.4 million goats, and about 30 thousand horses and mules in Nepal. Of the figure, yak, yak-hybrids, Tibetan goats (called *chyangra*) and sheep are husbanded in higher altitudes. The report shows that the number of sheep is slightly larger than the goats in high altitude areas. Of the estimates of seven high mountain districts, namely, Kalikot, Jajarkot, Jumla, Mugu, Humla, Dolpa and Mustang, the total number of sheep was 297 thousand while the number of goats was 254 thousand.

horses and cattle graze in high altitude pasturelands, with yak and nak remaining above 3,000m for the whole year, as they do not thrive below this altitude. Many of these herds, particularly *chauris*, keep on moving across the altitude according to seasonal variations in temperature. They graze on the higher altitude pasturelands during the summer and gradually move to lower altitude during the winter where sedentary farming communities live. At this point the practice experiences conflict with sedentary groups. Apart from the seasonal movement across the altitude, many herders use herds as a means of transport for consumable items. These *en route* pastoralists also face some problems.

Transhumant pastoralism makes important contributions to Nepal's economy basically in three ways. First, it provides a number of animal products such as milk, meat, wool and leather. Second, it provides the draft

power that is so crucial in the mountainous region due to lack of conventional modes of transport such as road. In fact, these herders have historically played an important role in promoting mountain trade between China and India. Third, herding is closely associated with NTFP trade in the region as herders simultaneously engage in NTFP harvesting and trade (Miller 1993). Herders possess important traditional knowledge of NTFPs, particularly medicinal plants in the region.

Human settlement and use of rangelands in Nepal's high altitude region have a long history of over 1,000 years (Byers 1996, Miller 1993). As the region was largely inaccessible mountain terrain, state had little interference in resource management and, therefore, indigenous systems could flourish. In some cases, pastoralists used to pay regular taxes to religious institutions often in the form of *ghee*, milk and *chamar* (the tail of *chauri*). For example, Gurungs of Barun (Acharya 1989, Acharya 2003) and the *guthi*<sup>1</sup> of Bhimeshwar Temple in Dolakha used to receive such taxes.

State intervention through national policies and Acts on pasture and forests lands gradually undermined these indigenous institutions. The Pasture Act 1974 was the most crucial among them. Although the Act came in response to complaints of monopoly of some Ghale families on the pasture in Barah Pokhari Lekh in Lamjung District, the outcomes were contrary (Acharya 2003). Although the intention of the Act was only to break the monopoly of certain groups over local pasturelands, it was misinterpreted and considered as nationalization of pasturelands. It was a typical case of wrong policy decision that had inadequate information on the local context (Rai and Thapa 1993). Although the Act aimed at dismantling the existing forms of tenure arrangements over pasture, many community groups continue to own *Kharkas* (pasture land) with well recognized boundaries regulated by indigenous systems (Baral 1996). The poor reach of state

interventions in these pasture lands has created gaps between policies and practices.

The Forest Act 1993 became another major intervention after the Pasture Act to undermine pastoralism. The new Act prioritized and promoted community forestry that expanded even in rural and remote areas and interacted with many indigenous practices, including transhumance pastoralism and *en route* pastoralism. Although the Act and associated regulatory frameworks do not formally exclude pastoralism from community forestry, conflicts between them are being observed in several parts of the country. The following case from Suspa region of Dolakha district reflects this conflict and the attempts made to resolve the conflict.

### A CASE FROM SUSPA, DOLAKHA

Suspa village is situated about 3 km north-west of Charikot, the district headquarters of Dolakha. It is located at 1,890-3,300 masl. The village faces south-east and the forest lies in the upper part of the village. Brahmins hold most of the good irrigated farm land. Thamis and Sherpas often hold *bari*, which is less fertile and rain-fed land. Integrated farming is the main basis of livelihood where farm, forest and livestock are inter-related. Poor people rely on either share cropping or agriculture-based wage labour.

Among the 300 households in the village, about 20 Sherpa households used to keep *chauris*. They used to take their herds towards the northern high altitude range lands. Although they also practise sedentary farming, some members, mainly adult male, used to take their herds with them. During the winter, herders used to come close to Suspa, where their herds competed with the cattle of sedentary farmers, who used the same area of forest for collecting fodder and for grazing. Sometimes herders from other areas also used to come. They used to pay a nominal charge to the *guthiars* from Dolakha every year.

Since the 1980s people have been experiencing scarcity of forest products. Availability of fodder and grazing land was of particular concern to them. They began to perceive threat to their livestock farming, which was an important source of their

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<sup>1</sup> These are religious institutions which own property and work under rules and norms to regulate their members and property. Similar provisions of payment to *guthiars* are also reported in Bhutan (Wangchuk 2003 cited in Muktan *et al.* 2008).

livelihood. With the perception that transhumant pastoralists were earning significantly higher income each year by using the common resources as compared to the people living in lower altitudes, who were practising sedentary agriculture, the lower altitude people started bringing their cattle to higher altitudes, significantly affecting the quantity and quality of forage. This was a tit for tat treatment by the sedentary communities. After a series of internal discussions, they introduced some measures to restrict people from areas outside Suspa VDC from using forest resources within the VDC area. They imposed certain taxes on outsiders against the use of their forests. So far, the tax collected from outsiders for using the forest is being spent by the VDC on festivities such as offering food to the pilgrims coming during *Janai Purnima* (a special 'full moon' day in August), organizing religious functions at Bhimeshwor Temple (during *Biwah Panchami*) and Kalinag Temple (Snake Temple), providing food for the poor, *Kanya* (young girls) and *Jogi/Sanyasis* (monks), and offering *Daan* (charity). The tradition still exists in some form.

In 1995, the forest was formally handed over to local communities as community forest. Since then the forest is being managed by a Community Forestry Users Group (CFUG) as a formal/legal body<sup>2</sup>. In response to forest degradation, grazing and other 'unsustainable' harvesting practices were gradually discouraged by the CFUG. Herders were particularly blamed for grazing their cattle beyond the boundaries; overusing fuelwood to keep their huts warm and distil alcohol; haphazardly felling trees for making wooden planks for sheds and fences for herds, etc. It is learnt that the consumption of fuelwood, particularly of selected species, such as *chimal* (*Rhododendron species*), has been too high, thereby putting high pressure on these species. The herders also fell big timber for obstructing the movement of *chauri*, used planks and other timber to construct huts every month or so. Moreover,

they lop some fodder species such as *Kharsu* (*Quercus semicarpifolia*) very severely.

Accusing them of practising these 'degrading' activities, herders were harassed, humiliated and indirectly forced to quit their age-old occupation. They are usually scolded in assemblies, charged with destroying the forest, grazing their *chauris* beyond the boundary, etc. The general assemblies and committee meetings became hostile to herders so that they gradually began to avoid such meetings. Although the herders tried to defend their case, the CFUG office-bearers and other members did not appreciate their voices. As a result, grazing was formally restricted within the community forest boundary. Along with this decision, the existing system of paying tax to Bhimeswor Temple *guthi* was ceased. The herders had paid penalties on several occasions for their herds entering the community forest. The conflict is partially settled with the mediation of district-level stakeholders. Now, herders from the same CFUG are allowed to use the forests at higher altitudes, which are not used by the sedentary farmers.

The number of herders has declined drastically. For example, in the early 1990s there were over 40 herders in and around Kalinchowk area, of which 16 were in Suspa alone. The number has now decreased to just 20, including six from Suspa. There are a number of factors contributing to the decline of this traditional occupation. These factors include: a) new legal and institutional interventions in managing forests that displaced or undermined the existing institutions and practices; b) many of the herders have sent their children to private schools in the cities, mainly in Kathmandu<sup>3</sup>; c) even from rural Nepalese standard, the occupation is considered to be backward, making it socially less rewarding; d) after the introduction of multiparty political system in 1990, followed by adoption of liberal economy, a large number of Nepalese youth have flown to East Asia or Middle East, largely for manual jobs. This availability of alternative earning

<sup>2</sup> *Chauri*-keepers who are using the government pastureland are, however, using the pasture by paying some taxes to the local governments, particularly to the VDCs concerned, annually in the form of cash or *ghee*.

<sup>3</sup> These young boys and girls, once graduated, prefer urban industrial desk jobs and dislike farming in general and transhumance pastoralism in particular due to the physical hardship it entails and its isolated nature.

opportunities has drawn the youth away from this practice.

While herders have faced serious threats to their traditional occupations, limited attention has been paid to the contribution of the practice to the local and national economy. Based on interviews with some herders in Suspa, we learnt that, despite several problems, *chauri*-keeping is still an economically rewarding enterprise. One healthy *chauri* gives birth every year and a total of 18 times in her life. Usually the gestation period of a *chauri* is 9-10 months. The herders in Suspa keep an average of 15 adult *chauris*, producing around 17,000 litres of milk annually. Based on the current market price (July 2008), the average annual income of a herder is estimated to be about NRs 200,000, of which about NRs 4,000-5,000 comes from the meat, horn and tail of the *chauri* and the rest from *chhurpi* (hardened cheese) and *ghee*. As the area has poor access to market, they cannot sell fresh milk and have to rely on *chhurpi* and *ghee*. According to them, though they have to rely on the sale of *chhurpi* and *ghee*, it doesn't significantly reduce their income. However, if we calculate the market price of their average milk production, i.e., 17,000 litres per year, they would earn at least NRs 340,000 (at the rate of NRs 20 per litre). Had they easy access to market, their potential income would be 70% higher than the existing income. Apart from the sale of *chauri* products, herders also make good earning by preparing home-made liquor and trading in high value NTFPs.

The level of income earned by herders appears quite high compared to the rest of the community members, who are hardly earning their subsistence. Because of the income through *chauri*, they have been able to admit their children in private schools in Kathmandu, some even in expensive boarding schools. In fact, the perceived high earning of the herders, generated through the exploitation of the common pool resources, appears to be one of the drivers of resource conflict in the region. The people following sedentary farming practices feel that the earning of *chauri* keepers comes from the exploitation of the resources that they own equally.

It is not surprising to know that transhumant pastoralism operates largely

without any external support. Neither any government agencies concerned nor other support agencies have any programme for herders. A number of governmental and nongovernmental agencies have implemented their programmes in Suspa to support various livelihood activities. The district level government line agencies also have various programmes to improve local livelihoods. Herders and their enterprises, however, have received almost no support. According to the government's District Livestock Development Office, they have recently begun some support programme for herders such as breeding, pasture improvement, trail repair and institutional development (in the north-eastern part of the district and not in the areas under this study). Herders in these areas have formed '*Brihattar Chauri Bikas Samiti*' (meaning 'Holistic *Chauri* Development Committee') so that they can organize all the herders, making their voices heard to policymakers. In an interview with the researchers, the herders complained that they are being treated as stepchildren and are often excluded from government support for social and economic activities.

The district level stakeholders also had negative views about grazing. In a multi-stakeholder meeting on the issue of transhumant pastoralism, held in the district headquarters, some government officials and proponents of community forestry put forth their opinion that grazing was the major contributor to forest degradation. According to them, a single herder felled an average of eight trees a year to construct his hut and wooden fences (structure made to regulate herd movement).

## **DISCUSSION: KEY ISSUES AROUND TRANSHUMANT PASTORALISM**

The issue of high altitude resource management and the emerging crisis of transhumant pastoralism can be analysed and understood from different perspectives. From the point of view of tenure, the issue of transhumant pastoralism is primarily a conflict between the customary practices of pasture management and formal process of community forestry. Herding was largely being operated under customary practices with hardly any state intervention. The state intervention through the introduction of

community forestry collided with the customary institutions and practices. The case of Suspa throws some insights into the issues around high altitude resource management in general and transhumant pastoralism in particular. The issues are briefly discussed below.

### **Discourses Promoted by Research Reports have Strong Influence on Resource Management Practices**

Many academic writings and reports promote the view that grazing is the major degrading factor in the region. Many reports show that high altitude forests in the Himalayas are degrading fast so that these forests have been converted to shrub land and denuded hills (Tamrakar 1995, Massersmidt and Rayamajhi 1996 cited in Baral 2005). They report that pasture lands are being treated as open access (Rai and Thapa 1993), and, therefore, face the tragedy of the commons. In fact, these reports on pasture land are part of the grand narrative popularized by the Theory of Himalayan Degradation during the 1970s and 1980s (Ives and Messerli 1989). Many government officials, urban educated opinion-makers and community forestry leaders subscribe to this view. Consequently, any big gatherings, particularly multi-stakeholder meetings delegitimize grazing. Miller (1993), however, claims that the widespread view of overgrazing and rangeland degradation is not supported by any quantitative data. He argues that detailed assessments of rangeland resources have yet to be made and linkages established with the number of cattle, mode of grazing and a number of other elements of the system.

### **State Intervention in Forestry Ignored and Indigenous System Undermined**

The Suspa case shows that the introduction of community forestry as the government's formal programme did not adequately recognize the rights of these pastoralists, who have used the forest for generations (Baral 2000, Winrock 2002). Whenever some negotiated arrangements have been made, they are exceptions not rules. It is observed that diverse indigenous institutions and practices existed before the state intervention such as the Pasture Act 1974 and the Forest Act 1993. The indigenous

institutions regulated transhumant pastoralism where herders were enjoying grazing rights by paying a nominal fee. The centrally designed and implemented state policies fail to recognize these historically developed institutions and practices. For example, rotational grazing in Kalinchok area (reported also in Aliról 1979) was in operation since several generations and that the practice was regulated by well-defined and mutually agreed upon rights and rules, and backed by various social sanctions. There were seasonal restrictions on certain pastures. For example, in Thili Kharka, Solukhumbu (Gibbon *et al.* 1988 cited in Rai and Thapa 1993) and most parts of Mustang (Kunwar 2004), access to certain pastureland is restricted during winter, or seasonally regulated (i.e., different areas are allocated for grazing in summer and winter). Schmidt-Vogt (1990) also reports that, in the Jugal Himal area, the ridges are divided into grazing zones, each belonging to a particular village. Although many of these practices still exist, they have been facing the problem of legitimacy and have gradually been eroded.

### **Resource Conflict between Herders and Sedentary Communities**

The resource conflict between herders and sedentary communities is apparently an economic one. On one hand, herders are riding over the commons, making good income and many of them sending their children to private schools. On the other, sedentary communities are struggling hard even to earn their subsistence. They feel that herders are benefiting from their resource base. In the midst of these resource conflicts, state intervention, particularly the introduction of community forestry, has directly favoured sedentary communities against herders. The sedentary communities have capitalized on the legal provisions of community forestry and also mobilized their political constituency to support their case, protect their interests and exclude herders from using the forest. The Suspa case helps us rethink on the dominant discourse that community forestry has induced resource conflict in the high altitude region.

The dominant groups in the communities use the narrow notion of 'community' as the sedentary community with rather permanent and regular use claims over

certain resources. This particular understanding of the community has hindered embracing transhumance pastoralists as legitimate members of user groups. The herders, on the other hand, are too weak to fight against the dominant discourse and practices, and, therefore, adopt various coping strategies to protect their livelihoods, changing the livelihoods strategies *per se* at worst.

### **Low Responsive Policies on High Altitude Livelihoods and Resource Management**

Policy ignorance of transhumant pastoralism indicates a general lack of attention to the high altitude livelihoods and resource management. It appears that, although local stakeholders and national policymakers recognize the economic potentials and environmental sensitivity of high altitude resource management, the region has always been excluded from the process of mainstream resource governance. Many scholars see this as a part of unitary state, often dominated by upper caste men, largely from the mid hills. The recent movement for inclusive state, particularly by *Madhesis* and *Janajatis*, also reinforces this argument. This particular phenomenon is even more visible in the forest policy processes. Many people argue that the current model of community forestry has its root in the mid-hills where it has successful outcomes. But this model should be adapted to accommodate the unique features of high altitude resource-people dynamics such as large chunks of pasture land, inaccessibility, and sparse and highly mobile population. There is a need to develop models through specific piloting (Baral 2005) and multi-stakeholder processes.

### **Impact of Bilateral (Trans-boundary) Agreements on Pasture and Livestock**

The migration of animals from northern Nepal to the pastures of the Tibetan plateau traditionally occurred either during the winter, when herds from western Nepal were moved to the dry uplands of Tibet to escape the harsh winter, or during the summer, when animals were moved from the eastern parts of Nepal. Following the Chinese takeover of Tibet in 1959, the centuries-old annual movement of Nepalese herds was disrupted. Since then, further negotiations have been held on rangeland availability for

both Nepali and Tibetan herds, and in 1983 the two governments agreed to completely stop animal migration from both countries by April 1988 (Yonzon 1998, Kunwar 2004). A number of reports highlight degradation of pastoral areas and their environment as a result of stoppage of trans-border movement of animals (Yonzon 1998, Rai and Thapa 1993). People in these areas are reported to be still hoping for an agreement with the Chinese government to allow them to continue their historical practices (*Kantipur*, October 2, 2003); however, the 1986 agreement between the governments of Nepal and China on trade and other related questions explicitly forbids herding and grazing across the border. A letter of exchange concerning trans-frontier pasturing was signed between the two countries in 1999, but its contents have not been disclosed to public in an easily understood way.

### **Livelihood-based on Transhumant Herding System is in Threat**

Information from Suspa, as well as literature on the issue shows the numbers of herds and herders have drastically declined in the last few years. The shrinking access to pasture lands due to new legal and institutional interventions is said to be one of the major causes for this decline. Other factors include the changing preference among the new generation and the availability of labour market abroad, which is partly the response to the first factor, i.e., tenure insecurity on the pasture resource. Apart from the threat to the livelihoods of herders, the phenomenon has other consequences. Herding has been a good way to exploit the natural capital in the form of extended pasture land in the high altitude (Wangchuk 2003, Moktan *et al.* 2008). However, the restriction on grazing along the lower elevation during winter has created problem for the system. As a result, the vast pasture lands in the high altitude region will be left unused--a missed opportunity. Similarly, the collection of and trade in many valuable NTFPs that have been closely linked with herding is also in a crisis. Together with decreased collection, there is a threat that the rich knowledge of these NTFPs among herders will be lost.



## CONCLUSION

The indigenous system of livestock-based livelihoods in high altitude areas has been hardly attended by the existing policy and regulatory frameworks, and, therefore, the traditional use rights of certain communities have been undermined. Transhumant pastoralism has been facing threat of existence due to the encroachment by new regulatory provisions promulgated by the government. If community forestry defines the users of certain resources such as forest and pastureland as permanent inhabitants of the area, transhumant pastoralists will have to seek alternative livelihood strategies. In Dolakha and elsewhere, they are abandoning their traditional occupation because of tenure insecurity over their resources which they were using since generations, though this is not the threat. There is a need for responsive and multi-stakeholder deliberative policy and institution-building processes for high altitude resource governance to protect the unique culture and rights of the people living in the areas.

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