

*High Altitude Animal Husbandry and the Thakalis of Thak Khola:  
Biology and Trade in the Himalays*

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A successful system of animal husbandry is the critical element in maintaining a successful trading system in an area with poor transportation, such as the Himalayas. Although I have argued elsewhere (Manzardo, 1977), that access to pack animals and plentiful pasture land gave the Thakalis an advantage over neighbouring groups in establishing themselves as the major trading group in central Nepal, my stress has been on economic and social structural factors in the Thakalis' adaptation to life as traders. In this article, I would like to change emphasis and discuss some of the biological and biosocial elements of that adaptation, as well as mention some of the special features of Thakali high altitude husbandry.

The traditional home of the Thakalis is a section of the Thak Khola region of the upper Kali Gandaki river valley known as Thak Sat Sae. The valley floor of Thak Sat Sae lies at approximately 2500 meters, with hills rising steeply on either side of the valley. The rapid changes in altitude provide the Thakalis with an habitat containing many small and sharply different micro-environments.

Domestic animals, on the other hand, are sharply limited by their own biological characteristics to certain defined altitudinal boundaries. Although there is some flexibility of habitat for each animal,<sup>1</sup> the animals domesticated by any group must be limited by the habitats the group has at its command. Since the Thakalis possess small amounts of land at many different altitudes, they have the potential for raising only limited numbers of animals, but can raise animals of many types.

Winter is harsh in the Thak Khola. Most animals find it difficult to survive outdoors. The Thak Khola has only a little winter pasture and fodder is limited. The animal population kept in Thak Khola for the entire year, therefore, must be kept low and be carefully selected. There is a surplus of summer pasture in Thak Khola and the animal population rises sharply at this time. These are not the animals of the Thak Khola Thakalis, however, but largely the animals from neighbouring Gurung and Magar villages, as well as the animals of Thakalis who have migrated to the south. It is profitable for the Thak Sat Sae Thakalis to rent their summer pastures to these outsiders since their inelastic winter animal population ceiling keeps their own summer pasture demand low. This is convenient to the southern groups as well. Winter pasture is plentiful for these groups, but is exhausted by the time spring arrives. Owners then have to seek out new places to pasture their animals. The pastures

of the Thakalis provide these spring and summer pastures. Without them, these groups would have to sharply curtail their animal populations as well.

The Thakalis placed their emphasis on the husbandry of pack animals; especially mules, donkeys and yak. Pack animals provided the basis for trade between India and Tibet. This was the major source of livelihood for Thakalis before the end of the trans-Himalayan trade in the early 1960's. The yearly cycle of trade, the availability of pasture and fodder, and the biological needs of the animals were closely in accord, as we shall see.

Mules were used in the southern half of the trans-Himalayan trade route. This part of the trade was carried out in the winter, when the roads were dry in the middle hills and the northern tarai and when it was too cold for mules to live for long periods in Thak Sat Sae. In the summer, when the monsoon came and made the roads impassable in the south, the Thak Sat Sae pastures were open and full of grass and the mules could have a rest, since they were not needed for trade at this time.

At this time of the year, the yak and cross-breeds, also raised by the Thakalis, were used to carry loads through the high passes into Tibet where the snows had just melted; areas too high for mules to travel. The yak prefers high pasture and can easily survive the cold winters of Thak Sat Sae. It cannot survive in low altitude areas. The biological needs and abilities of the yak, therefore, curiously complemented those of the mule. Thus the two major animals could be used at different times of the year for different transport needs. Each could be kept in its own niche within the variety of niches in Thak Sat Sae. Each served a different role within the Thakalis' overall strategy for survival.

Other animals are found in the remaining niches; animals to plough the fields, animals to ride and to provide milk and other products. These were generally few in number and relatively unimportant to the Thakalis who increasingly commanded so much economic power through their expanding trade.

It is the purpose of this article to explore the complex ballet of movement of animals through the system of Thakalis and to see how the necessities of animal husbandry affected certain historical decisions related to Thakali trade. More directly, however, we will show how the diversity of animals provided the Thakalis a means to prosper within a high altitude environment in Nepal. Finally, the animal husbandry of the Thakalis is looked at in light of its implications for the development of Nepal.

#### Mules, Horses and Donkeys

Mules and donkeys were the most important animals within the context of the Thakali trade in southern Nepal. Thak Khola lies in a river valley which is the major trade route between the Tibetan plateau and

the plains of India for central Nepal. It was once a very lucrative route because of the salt trade and the related trade in grain and wool.

India and the middle hills of Nepal lack salt, while it is plentiful in Tibet. Tibet was always a grain deficit area and was anxious, therefore, to trade its salt for the surplus grain of the south. Access to transport was a major factor in determining who could participate in this trade. Profit in the grain trade in the central Himalayas lies not in having a local monopoly in supply. Grain storage is still a major problem in the middle hills. Farmers or merchants are unable to store much grain for too long without substantial losses. Instead, success in trade is due to the ability to transport grain to places where it is scarce. The Thakalis ability to raise the necessary animals gave them the ability to carry out this trans-Himalayan trade at a profitable level. Since trade involved transporting wool and salt to the south and grain to the north profit could be made on both legs of the journey (Manzardo, 1977; 1978).

Mules are driven along the better-maintained roads of the middle hills between November and June each year. During that period, they walk constantly. Mules are well cared for, on the whole, but they tend to get quite run down during their working season. Once monsoon begins, the mules are taken off the trails and are brought up to pasture. Medicine is put on their backs and they are allowed to rest and heal for the summer.<sup>2</sup>

The major expense for the mule owner is fodder. While they are on the trails, mules are fed on barley grown in Thak Khola, since the grass is quickly eaten along the heavily used trails. A mule must be fed three mana (approximately forty-eight ounces) of grain in the morning and in the evening. Each mule consumes roughly three times a human ration in grain each day. With this type of daily fixed cost, mules cannot be kept idle very long.

The needs of the mules strongly effects the type of agricultural production found in Thak Khola. As traders, the Thakalis have been used to purchasing rice for their own subsistence for some time. Before this, however, Thakalis often subsisted on naked barley (uwa) in Thak Sat Sae.

Naked barley is a primary grain raised for human consumption in the high altitude areas of the Himalayas. It can be popped and ground to form tsampa, a precooked flour which can be mixed with hot tea to form an instant meal. It is a staple in the traditional diet of Thak Khola and to the north.

There is a second form of barley found in the area called hulled barley or jaun. This grain is not commonly eaten by humans in Nepal, except in its distilled form as liquor. It is still heavily produced in Thak Khola. The primary economic value of jaun is as a source of transportable animal fodder. The importance of this can be seen from the high production of this grain. At one point when fodder production

began to drop as the result of farmers switching to other forms of production, a localized cost spiral began in the area. It soon became the local equivalent of an "oil shortage," when the shortage of fodder began to drive up the cost of transport and with it the cost of all other goods in the area (Manzardo, 1976). We must conclude, therefore, that the heavy production of hulled barley in the Thak Khola is directly related to the needs of animal husbandry.

In spite of the sensitivity of the cost of animal transport to the price of grain, no other available form of transportation can compete with the donkey or the mule in the moving of goods in the Himalayas. If the cost of building and maintaining a motor road were included in transport cost calculations, this would include motor transport as well. This fact has tremendous implications for the development of the transport sector of the Nepalese economy.

In 1977, for example, mule transport between Pokhara and Jomosom cost ten rupees per pathi on the northward journey, and six rupees per pathi on the southward journey. Human portering cost eleven rupees per pathi going north, the uphill journey, and seven rupees south, a difference of between 10 and 20%. The actual difference is even greater most of the time, since this survey was taken at the period where the abnormal rise in the cost of fodder mentioned above, had been causing an abnormal rise in the cost of animal transport.

Thakalis' mules are not bred locally. The Thakalis have a taboo against cross-breeding animals. Most Thak Khola mules are purchased in Uttar Pradesh. A single mule costs between 2,500 and 5,000 rupees, and although they can be used for twenty-five years, they do represent a sizeable investment even for a wealthy trader.

Today, with the closing of the bulk of the trans-Himalayan trade in the Kali-Gandaki transect and the emigration of many of the wealthier Thakalis to permanent homes in the southern bazaar towns of Nepal, mules have become less important to the Thakalis of Thak Sat Sae (see Table 1). Although mules and donkeys continue to be used for transport in the area, it is no longer the Thakalis who keep them. The decline in the mule population is directly related to the lack of continued interest in localized trade on the part of the Thakalis. The people of Marpha, Panchgaon and Baragaon are still involved in local transport and keep large numbers of mules and donkeys.

Table 1. Number of Mules Kept in Selected Villages of Thak Khola.

Village	Number of mules
1. Taglung	0
2. Sauru	0
3. Larjung	15
4. Tukucho	36

Horses continue to be kept for personal transportation in Thak Khola, although they are not used for transport of goods, since a horse cannot carry as big a load as a mule, or operate as cheaply as a donkey. Therefore, they are not considered to provide enough profit in return for their upkeep. Horses must be stabled throughout the year and fodder is expensive, so they are thought of as a luxury in Thak Khola meant only for the wealthy. A horse cost 3,500 rupees in 1974.

Although the trade has diminished along the trails to the north, the importance of mules in Thak Khola still remains high. In 1977, the district headquarters of Mustang district became centred in Jomsom. Along with this came a programme of building offices and officers' quarters. The mules again took an important role in supplying food and building supplies to the government and the army. Thakalis still living in Thak Khola began to bid for supply contracts, and today one sees a return of some trade to the area. The arrival of an integrated rural development project to the area ought to have increased this trend. Without the trans-Himalayan trade, however, the importance of the trade and the mules will continue to be limited.

#### Yak

The yak population of Thak Khola seems to have risen in recent years (Table 2) gives a rough estimate of the yak population of several Thak Khola villages in 1977.

Table 2. Estimated Yak Population in Several Kali Gandaki Villages: 1977

	<u>Village</u>	<u>Number of herds</u>	<u>Estimated head</u>
1.	Kobang panchayat (nine villages)	29	1000+/-
2.	Tukuche	3-4	120
3.	Taglung & Kunja	3-4	120
4.	Marpha <sup>3</sup>	15	500

Yaks are utilized for milk products by the Thakalis, and for producing several types of wool.<sup>4</sup> Although the yak was once kept for its meat, it is no longer true.

The Thakalis are sensitive about the question of yak eating, because it represents the locus of an important set of status distinction in Thak Khola. Today, many Thakalis are trying to foster an image of being good Hindus. For this reason, the Thakali Social Reform Organization, which regulates much Thakali social behaviour (see Manzardo and Sharma, 1975), has banned both yak sacrifice and the consumption of yak meat within the group. The Thakalis point to their neighbours, who they claim still eat yak, and emphasize their lower status within the Hindu

system as a result of their continued old-fashioned ways (cf. Schuler, 1979: 65-72 for a detailed discussion of this situation.)

There are several yak pastures in Thak Khola. First, Marpha has its own summer and winter pastures on the western side of the river valley high above the old town of Marpha. Their winter pasture lies at roughly 4,000 metres, and the summer pasture is at 5,000-5,500 metres. The Thakalis themselves have several pastures of their own. Two are found in the hills above Taglung on the eastern side of the valley. The first is a winter pasture called Nupsang; and lies at 4,000-4,500 metres elevation. The second, the summer pasture, is called Marche and is just above at above 5,000 metres. Another pasture called Muli is found on the western side of the valley, high above the village of Kobang at about 3,700-4,200 metres. This area is only used in the winter each year. All yaks which use this pasture must be driven across the Kali Gandaki river twice each year going to and returning from the summer pasture at Mache. In order for the yak to find summer pasture they must be brought down from the Muli side, across the Kali Gandaki and be driven back up into the Marche summer pasture.

The yaks are in the hands of professional herdsmen or gothala. The work of a gothalo is lonely and dangerous, the trails to the pasture steep and dangerous, and the yaks bad tempered and unpredictable. The gothalo lives with about fifty other herdsmen for twelve months in the high pasture areas. These men come down only occasionally to pick up supplies. Gothala are paid a salary and are given a share of the dairy products. They are responsible for the care and safety of the herds as well as for collecting the milk and preparing milk products for delivery. The gothalo milks the yak and separates the butter. All other dairy operations are carried out in the village by the yak owners or their servants. Their only outside contact for most of the year is with villagers who come to collect these dairy products each week.

Milk production is primarily for household consumption, although butter is sold for use in preparing the salty Tibetan-style tea favoured in the area and for use in religious rites. A type of dried cheese is made as well. There is a shortage of milk products from November to June, after the yaks calve each year. Production increases again until the following winter.

Yaks are shorn once a year, just before they are driven to the summer pasture in mid-May. The ahir from the outer coat is woven into a heavy water-resistant cloth called pherpa in Thakali. This cloth is used to make the cover of the herdsman's tent. The finer inner coat of the yak is used to make blankets of the highest quality (seldom done by the Thakalis these days) or the fine hair can be sold for use in making shawls and mufflers.

In 1977, a female yak (mah) with calf cost approximately 1,500 rupees. A herd-owner has between 37,500 and 75,000 rupees invested in his herd. Yaks and cattle are not cross-bred in Thak Khola. We have pointed out that it is taboo for Thakalis to cross-breed animals. Cross-

breeds or dzoba (dzo: singular) are purchased in Dolpa and brought down to Thak Khola. Furer-Haimendorf confirms the statement of some informants that there was once an extensive trade in yak-cattle cross-breeds with Sherpas living in Solukhumbu. The cross-breeds of the Sherpas were considered superior to the local varieties and their sale was profitable enough to consider the risks of the long trek and smuggling them across from Tibet under the noses of the Chinese (cf Furer-Haimendorf, 1975: 195).<sup>5</sup>

Dzoba are generally slower and more docile than yak. This makes them more valuable as pack animals in most cases. Dzoba also are able to operate at lower altitudes than yaks. Kawakita quotes an old Tibetan proverb, "Where maize is planted yak cannot go" (1974: 43). It is generally held that yak cannot live below 3,500 metres for any length of time, dzo have been seen by the author operating in Darchula Bazar at 3,000 feet. Yaks are needed, however, to cross the highest passes.

Yaks and dzoba were more valued before the closing of the Tibetan trade. Now cross-breeds are becoming less common. Although dzoba could still be found in Marpha in 1977 and may still be present, they were no longer being raised in Thak Sat Sae at that time. Yaks' are still considered to be economical because of their wool and dairy production.

#### Cattle, Lulu, Oxen and Agriculture

The Thakalis keep few cattle of the low altitude varieties (Bos indicus and Bos taurus) on a permanent basis. The reason for this low cattle population is the lack of winter pasture in the Thak Khola and the need to stable cattle in winter. Although summer pasture is plentiful it is cattle from villages south of Thak Khola that are brought to pasture during the warm season. These cattle have to return to the south, however, before the winter begins. For the Thakalis themselves, stable space was limited and was often needed for pack animals, which made visits throughout the winter. Since the pack animals were the major source of profit for the Thakalis, the larger cattle seemed a poor investment and were seldom kept.<sup>6</sup>

Thakalis and other groups living north of Kanti do keep a miniature breed of cattle called lulu to provide daily milk needs. These animals produce nearly three litres of milk per day, a high production relative to their size and fodder consumption. Lulu are relatively cheap to purchase. A four month old lulu cow cost only 550 rupees in 1977, or only about 100 rupees more than a mature goat at that time. Moreover, the lulu are so small that they can easily be stabled throughout the year and thus all of its manure can be captured for use in agriculture.

Oxen continue to be kept in areas where grain production is important, but fruit production and other types of agriculture had begun to replace grain production in many areas by 1977. So oxen had appeared to be growing less essential to local agriculture as frequent ploughing was seldom practiced in Thak Khola (Manzardo, 1976). My own survey of the area for 1977 is shown in Table 3.

Table 3. Cattle Holdings in Selected Villages of Thak Khola, June, 1977

<u>Village</u>	<u>Altitude (ft.)</u>	<u>Cattle</u>	<u>lulu</u>	<u>oxen</u>	<u>Total</u>
1. Kunja	8700	400	0	100	500
2. Ulla Taglung	9200	150	0	40	190
3. Larjung	8600	125	0	14	139
4. Tukucho	8600	150	0	50	200

The Thakalis' emphasis on animal husbandry, of course, has affected the crops they select. This is more important for the lower altitude animals such as cattle or sheep. These animals are allowed to use the agricultural fields during some portion of the transhumance cycle; eating grain stubble or feeding on fallow areas. For this reason, the agricultural cycle has to take into account the transhumance cycle. Beans and millet, for example, cannot be grown in Kunja and Taglung because they would be standing in the fields during the period when those fields would be needed as pasture for cattle. The interconnections between the pastoral cycle and the agricultural cycle are important, but the situation is quite common in Nepal and not particular to Thak Sat Sae. Mules and higher altitude animals, however, create no such problem for farmers as they are either on the trail or in pastures far above the agricultural areas.

#### Sheep and Goats

There are four types of sheep and goats found in Thak Khola. These are: a low altitude variety of sheep (bhera); a high altitude variety of sheep called chaaluk; a high altitude goat called changara; and the common low altitude goat or bakhra.

Sheep were once used as pack animals by the Thakalis, and were particularly important on the section of trail between Tatopani and Khasa, south of Thak Sat Sae. This was a poor road at one time and could only be traversed by human porters and sheep (cf. Hamilton, 1819: 274, Bista, 1976:89, Hagen, 1971 plate captions for plates 67 and 71; Tucci 1962:27). A new road was built on the east bank of the river in 1962, which made the entire route passable to mules.

Sheep can carry quite extensive loads. Elsewhere we have estimated that a flock of two hundred sheep could carry as much as 2.25 metric tons of grain. The general load is about two pathi per head, one in each of two sacks (lukhal) lashed one on either side of a sheep.<sup>7</sup> Kawakita reports that he saw sheep being used between Jomosom and Lumlei, probably on his 1953 expedition, although he does not specify the date. It is unlikely that sheep were continued to be used long after the new stretch of road opened the entire Jomosom trail to use by larger animals. This caused the Thakali-owned sheep population to dwindle. Others, as we have pointed out, continue to bring their sheep and goats to Thak Khola to pasture in the summer. Table 4 lists populations of sheep and goats in selected areas of Thak Sat Sae in 1977.



Table 4. Locally-owned Sheep and Goat Populations in Selected Villages in Thak Khola in June, 1977.

<u>Village</u>	<u>Goats</u>	<u>Sheep and Goats</u>
1. Kunja	-	400
2. Ulla Taglung	-	0
3. Larjung	150	0
4. Tukucho	150	0
5. Marpha	-	351

Thakalis do not keep sheep in large numbers for the same reason they don't raise many cattle. The severe limits on available fodder and winter pasture make it uneconomical for the Thakalis to keep large flocks of sheep. Instead the Thakalis rent their excess summer pasture space for the flocks of others and keep the size of their own flocks quite small.

The Thakalis of Taglung rent the use of the Marche pasture to outside shepherds for cash. In 1977, for example, the rent was 100 rupees per flock of sheep for the season. There were eight flocks using the pasture that year. The owner provides his own shepherd, dogs and supplies.

The other Thakali villages rent their share of the other common pasture, the Muli pasture, as a group and demand payment in kind. In 1977, the price was one to two sheep from each flock depending on the flock size. The sheep which are collected as rent are used for the yearly sacrifices to the village earth deities.

Tukucho was once a centre for the livestock trade. According to Furer-Haimendorf, as many as 20,000 sheep were driven down through Thak Khola each year until 1959, when the Chinese put restrictions on the trade. Until 1945, for example, the price of a goat was 25 rupees. By 1958, the price had risen to 40 rupees. In 1960, the price of a goat had fallen again to 30 rupees as refugees began to cross the border into Nepal with their livestock from Tibet with no access to pasture land and no way to feed their flocks. When this surplus disappeared, the price again rose and by 1962 it reached 70 rupees a head (1975:193-194). Kawakita reports that the price of a sheep in 1963 was 93-75/- (1974:95). By 1977, the price was more than 400 rupees.

After the start of the Chinese restrictions on the livestock trade, Thakalis began to go to Dolpa to buy sheep. Jest, in a personal communication, reported extensive Thakali sheep holdings in Dolpa. As the Thakalis began to migrate out of Thak Khola, however, their interest in the sheep trade diminished and others took it over, often with Thakali financial backing. Although locally-raised livestock continues to be sold, but at nowhere near the pre-1959 levels.<sup>8</sup>

Wool trade was a major source of income for the Thakalis at one time, although very little of the wool which was traded was raised in

Thak Khola. According to Furer-Haimendorf (1975:191-193), Tibet was a major source of Indian wool, but although the Thakalis had control of that portion of the trade that came through the Kali Gandaki valley, it still represented very little of India's overall imports. By 1962, the wool importing business had already declined immensely.

### Conclusions

We have discussed the linkages between animal husbandry and trade in Thak Sat Sae. We have pointed out that the Thakalis emphasized raising animals which either directly supported their trade links: such as mules and yaks; or which were themselves objects of trade: such as sheep and goats. Few animals not related to trade were kept.

The study of the features of such an animal-based transportation system in the Himalayas, although now largely a historical study, yields some important points relevant to the development of Nepal. First, it is clear that the Thakalis were able to maintain an efficient and profitable trade network in Nepal utilizing only pack animals, without having need for more modern forms of transport. This system could be maintained without major road improvements, although these were accomplished when necessary with minimal external support (such as the improvements made on the Khasa sector of the Jomosom trail in 1962). The transport system of the Thakalis was cheap and efficient within its own context, and was manageable within the means which were available to hill dwellers.

The study of this Thakali system, however, shows that roads themselves are not sufficient. The key to the success of the Thakalis has combined access to adequate roads with having the proper animals and a means to feed them efficiently. The Thakalis relied on mules for southern trails and yaks for the northern passes. When the trails were bad, the Thakalis used sheep to carry their loads. Thus the animals used were those that could best manage under local conditions. The mode of transport used was appropriate to the roads.

The Thakalis also developed an efficient management programme for their pasture areas, controlling access and charging outsiders for its use. They also developed a system of grain production for use as animal fodder. The Thakalis kept down their cattle population and limited other peripheral animals so that their limited resources could be concentrated on animals which brought the greatest return. Their example could be applied to other areas in Nepal.

The creation of such a transport system is not a simple task. No single activity, such as mere road building, can bring such a system into existence. This is a task which requires a truly integrated approach.

There is a belt of potentially utilizable grassland near the Mahabharat range of Pyuthan, Rolpa and Salyan districts, for example. This area could be developed to increase fodder production. This development would require the efforts of several agencies. The Livestock Department,

for example, has several varieties of improved grass seeds available to it. Agriculture would have to develop an extension programme to teach pasture improvement and production techniques. The Ministry of Panchayat and Local Development would be needed to begin the construction of mule trails or improve current trails, shifting emphasis away from expensive and hard-to-maintain motorable roads. Livestock and mules must begin to be imported, or even better, to be bred for transport. Together, these efforts could act to support the formation of a transport system more appropriate to Nepal's hills.

Currently, there are many places outside of Thak Khola which use pack animals, but horses or sheep are being used instead of mules (Manzardo, Dahal and Rai, 1976). Horses are neither strong nor economical because they require better quality food than mules. These need to be replaced on a systematic basis. Roads need to be improved so that larger animals can be used. Credit is needed to help individuals purchase mules.

I visited a Small Farmers Development Project in Rolpa in 1981. Loans were being arranged for many poor, landless farmers, to make it possible for them to purchase pack animals to make a living. Other projects were to be carried out in the programme area and materials had to be transported to local project sites. The SFDP group organizer, therefore, financed his projects in such a way that the recent purchasers of pack animals would be given "captive contracts" making it possible for them to pay back at least part of their loans from money earned transporting these needed goods. This type of approach could be applied elsewhere.

If the goal of improving hill transportation is to increase the flow of goods and services into the hills and get the loads off human backs, then a system of mule trails, rather than motorable roads, seems a more reasonable approach. Mule roads are easy to maintain. They do not increase oil consumption and thus do not deplete the nation's foreign currency reserves. Most importantly, mule trails allow local economies to grow slowly, without being inundated from the outside. The Thakalis have shown that motor roads are not the only answer, nor even the best answer to the problem of hill transportation in Nepal. Other alternatives exist and should be explored.

#### NOTES

1. Water buffaloes were found by the author living at 8,000 feet in Taglung in 1977 far above their normal expected range. (Kawakita (1974:43), for example, has reported that buffaloes are not found north of Dana). Keeping buffaloes at this high altitude necessitated nearly constant stabling in an area of the Thakali house normally reserved for commercial activity. As Taglung was an agricultural village and had no commercial activity as such, the area was free for other uses, here to stable buffalo. Since Thakalis claim they don't eat buffalo (as it is considered a cow

from a ritual point of view) and since the milk from a buffalo is hardly profitable enough to justify efforts to keep it; it should be assumed that the buffaloes are kept for reasons other than economic ones. Upon more careful study, it was found that the wife of the householder came from a Thakali family living in Pokhara. She had married back to Thak Khola and brought with her a taste for milk tea, rather than butter tea. The buffalo was a concession to her past.

2. Mules are extremely hardy. I once saw a mule fall from a steep trail south of Ghorepani in the monsoon of 1974. The mule fell, fully loaded, crashing through the trees along the steep hill side. The children walking with us began to cry and the wife of the driver got a look of resignation on her face. The driver slipped over the side, I thought, to pick up the packs of the now broken body of a dead mule. He was gone about ten minutes, but when he came back, he was leading the mule. No human would have survived that fall, yet the mule continued up the trail.
3. Valiex claims that Marpha had a yak population of 102 (1974:273-274). This figure seems more reasonable than the one I was given, but as I was unable to get up to the Marpha yak pasture in 1977. I have repeated the figure passed on to me by the Marphalis.
4. Thakalis believe that the blood of the yak has medicinal properties. They say, that because the yak lives in the high pastures where medicinal plants grow, they must eat them. The medicinal properties of these herbs are said to enter the bloodstream of the yaks, and therefore would be absorbed by those who drink the blood of the yaks. Drinking yak blood is considered, therefore, to be highly beneficial; especially to sedentary Thakalis who spend the year sitting in their stores in large bazaar towns. The benefits of getting out and trekking four to eight days to the yak pasture, spending several days in the fresh air and then returning over the same strenuous route is not considered by the Thakalis in their evaluation. Instead of exercise; the Thakalis attribute the improvement in health to drinking the yak blood itself.

Yak blood is drunk two times each year: once just before the yaks leave Nupsang pasture, and the other in the summer when the yaks are in the Marche pasture. The second of these periods is more important, when hundreds of Thakalis close their stores and travel to the pastures for fifteen days of eating, drinking and good fellowship.

Blood is taken from the carotid artery by the herdsman. He knows how to extract the blood from the yak without injuring it. No more than six tea glasses are taken from each yak. The blood if then sold for about three and a half rupees per glass (1977 figures). The flow of blood is staunched by placing a piece of dung over the cut.

5. A complete account of yak-cattle cross breeds in Dolpo can be found in Jest, 1975, 138-141. The quality of a cross breed can be determined if you know whether the mother was a cow or a yak, whether the animal is a first or second cross and finally the question of the genetic qualities of the parents. A female yak crossed with a bull is called a drimdzo and female cow cross with a yak bull is called a phamdzo.
6. The Thakalis were once largely dependent on itinerant trade as a basis for survival and as a consequence were largely dependent on their pack animals. In recent years, however, the Thakalis have increasingly migrated out of Thak Khola and have taken up positions as retail merchants in more southerly bazaar towns (Manzardo, 1978). The combination of migration out of Thak Khola and increased dependence on sedentary commercial occupations mean that very few Thakalis are now concerned with occupations which bring them into contact with livestock to anywhere near the degree that once was the case. Many of their decisions involving livestock and the relative importance of one animal over another, however, still remain valid. Although the Thakalis may still own large numbers of animals, individuals actually handling animals usually belong to other groups.
7. This measurement of the load capacity of sheep was arrived at based on figures obtained on fieldwork done among the Byanshi or Sauka, by the author and his colleagues in 1976. The Byanshi at that time were still using sheep for trade transport. The sheep was the only animal that could be used in that far-western area, due to the poor quality of the narrow roads (cf. Manzardo, Dahal and Rai, 1976: 88). Kawakita claims that the pathi, a Nepali measure, gained popularity because it coincided with the load of one sheep's bag (1974: 29).
8. Meat and the preparation of meat have a special significance to the Thakalis. Some of my most delightful afternoons in Thak Khola were spent participating in activities involving the preparation of meat. Since goats or sheep are expensive and since refrigeration is non-existent, it is most economical to purchase and consume meat communally. The sharing out of the meat and its preparation becomes a community activity, rather than an individual family one. All Thakalis in the community can share in these activities as equals regardless of their economic status within the community.

The animal is slaughtered by cutting its throat outside the house of one of the shareholders. The blood is saved in a pan. Nothing goes to waste. The carcass is cleaned (skinned in the case of a sheep, the hair burned off in the case of a goat) and beheaded before it is brought into the house and laid on a tarpaulin in the middle of the main room. The entrails are removed and the carcass is cut into small pieces by the shareholders. The meat is then arranged in equal piles for later distribution; one pile for each share purchased in the sheep or goat.

Several Thakali delicacies are prepared by the men who have shared in the cost of the goat and while the food is being prepared, the wife of the householder sells liquor to the shareholders.

Each man then gives his marker; a feather, a button, a small pebble etc., to a small child. The child is told to put a marker on each pile of meat. Since the child does not know which marker is which, the effect is nearly a random selection. Each man takes the pile corresponding to his marker or markers. Any disappointment is soon dispelled when the cooked meat and soup is brought out. Everybody eats and drinks his fill. Everybody pays his bill for liquor and the meat and sets off for home.

This activity serves to bring together the community together to carry out other activities as well, such as the settling of community problems or discussions about joint activities. Its importance is reiterated by the fact that this communal meat preparation by an individual's close friends and neighbours (mag-pa) is an integral part of the large ancestor worship ceremony (Iha chowa), which was once an important part of the Thakali ritual year.

#### REFERENCES

- Bista, Dor Bahadur, 1976. The People of Nepal, Third Edition, Ratna Pustak Bhandar, Kathmandu.
- Furer-Haimendorf, Christoph von, 1975. Himalayan Traders: Life in Highland Nepal, Murray, London.
- Hagen, Toni, 1971. Nepal, the Kingdom in the Himalayas, Third Edition, Oxford, Delhi.
- Hamilton, Francis Buchanan, 1819. An Account of the Kingdom of Nepal, 1971 Reprint, Bibliotheca Himalayica, Series 1, Volume 10, Manjusri, Delhi.
- Jest, Corneille, 1975. Dolpo, Communautés de Langue Tibétaine du Nepal, Editions du CNRS, Paris.
- Kawakita, Jiro, 1974. Hill Magars and Their Neighbours, Tokai University Press, Tokyo.
- Manzardo, Andrew, 1976. "Factors in the Potential Regeneration of Thak Khola", Ecologie et Geologie de l'Himalaya, Editions du CNRS, Paris.
- "Ecological Constraints on the Trans-Himalayan Trade in Nepal", Contributions to Nepalese Studies, Volume 4, Number 2, pp. 63-81.
- Manzardo, A.E., Dahal, D.R., Rai, N.K. 1976. "The Byansi: An Ethnographic Note on a Trading Group in Far Western Nepal", Contributions to Nepalese Studies, Volume 3, Number 2, pp. 83-118.

Manzardo, A.E., Sharma, K.P. 1975. "Cost-Cutting, Caste and Community: A Look at Thakali Social Reform in Pokhara", Contributions to Nepalese Studies, Volume 4, Number 2.

March, Kathryn S. 1977. "Of People and Yaks: The Management and Meaning of High Altitude Herding Among Contemporary Solu Sherpas", Contributions to Nepalese Studies, Volume 4, Number 2, pp. 83-97.

Schuler, Sidney, 1979. "Yaks, Cows and Status in the Himalayas", Contributions to Nepalese Studies, Vol. 6, No. 2, pp. 65-72.

Tucci, Giuseppi, 1962. The Discovery of the Malla, G. Allen & Unwin Ltd., London.

Valiex, Pierre, 1974. "Marpha; Aspects Humaines et Economiques d'un Village du Pac Gau", Objets et Mondes, Tome xiv, Fascicule 4, Hiver, pp. 269-278.



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