

## From chapter 1, "The Sherpa Settlement Pattern" (pp. 12-15)

The settlement pattern of the Sherpas of Khumbu developed at a time when the average family spent only six to eight months of the year in a main village. In the case of the owners of yak this period was often reduced to as little as four or five months, and the rest of the year was spent in various subsidiary settlements. Recent changes in the Sherpas' economic activities (see p. 57) have led to a decrease in the number of families living for long periods in settlements close to the high pastures, but even so, periodic movements between different localities remain a characteristic feature of Sherpa life. Also some men involved in the tourist industry maintain temporary establishments in Kathmandu.

Subsidiary settlements consisting of solid houses and walled-in fields or meadows fall into two distinct categories, *gunsa* and *yersa* (or *phu*). *Gunsas* are settlements situated at altitudes lower than those of the main villages, either on ledges closer to the level of such rivers as the Dudh Kosi and Bhoté Kosi, or on narrow strips of level land along the banks of these rivers. Sheltered by the mountains rising steeply from the gorge-like valleys, they enjoy a milder climate than the more open main villages, and it is for this reason that many families move for the coldest part of the winter to one of the *gunsa* settlements. But this is not the only advantage of settlements lying anything between 800 and 1,500 feet lower than the main villages. Potatoes planted at such altitudes ripen earlier than those on the fields of the main villages, and this enables the Sherpas to spread the agricultural work over a longer period, and have new supplies of their basic food several weeks before the main harvest. Once the harvest has been gathered in the *gunsa*-settlements, they are opened to the cattle, and yak can be kept there and grazed on the nearby slopes, while the main villages with their ripening crops are still closed to all livestock. At that time, namely in late September and early October, the grass on the higher pastures has already suffered from the effect of heavy frosts, and yak-owners prefer therefore to keep their animals for some weeks in sheltered valleys, where there is still ample grazing. . . .

The number of *gunsa*-settlements is comparatively small, for the narrow valleys of the two main rivers of Khumbu do not offer much scope for the establishment of settlements with sufficient fields or meadows to make the building of houses worth the effort. Though the owners of yak find it convenient to own property in such winter settlements, it is possible to do without it and use temporary shelters of the *resa*-type at the time when the cattle are to be grazed in the lower parts of the valley.

The rôle of the subsidiary settlements known as *yersa* or *phu* is very different. Ownership of houses and meadows in some of these settlements situated among the high pastures above the tree-level is an indispensable concomitant of yak-breeding. Without such property no one can maintain even a moderately sized herd of yak, and all yak-owners spend a large part of the year in settlements comparable to the *Almen* of the Alps.

While a sheltered position and the availability of cultivable land are determining factors for the choice of a site for a *gunsa*-settlement, the vicinity of good, open pasture-land is of vital importance for a *yersa*-settlement. Apart from altitude and environment such a settlement is not inherently different from a *gunsa*-settlement. The houses are very much the same and there are walled-in meadows and, except in the very highest settlements, also a few walled-in potato-plots. But ownership of houses and land in *yersa*-settlements is of value only to the breeders of livestock. In order to be near their yak grazing on the high pastures, cattle-owners have to build or acquire houses in remote hill regions, and the necessity to feed the yak on hay during the long months of winter leads them to wall-in meadows where hay can be made to be stored for use at a time when the pastures are covered by snow.

However, there is one *yersa*-settlement in Khumbu which does not answer this description. Dingboche, lying at an altitude of 14,350 feet in a broad valley on the upper Imja Khola, shows certain features not shared by other high-altitude settlements. In Dingboche barley is grown on

irrigated fields, and land-holdings there are valuable quite apart from the place's use as a base for yak-herders.

Ownership of property in a high-altitude settlement is not confined to people of a single man village, but in some of the larger *yersa* there are houses and meadows belonging to people of two or even three different villages. The families congregated in such a settlement at any particular time are not a section of a village-community, and disperse again after a few weeks co-residence in the same locality.

Similar in purpose to the *yersa*-settlement, but very different in form are the primitive encampments known as *resa*. These structures consisting of a permanent, though crudely built stone wall, and a temporary roof of bamboo mats of yak-hair blankets, serve the herdsmen as shelters on pastures where they have no solid houses, but where it is convenient to graze the cattle for a few days. They are found on very high pastures, beyond the highest *yersa*-settlement, and again at fairly low levels so close to the main villages, that young boys can look after the cattle during the day and adults need go there only for the night in order to be near their animals in case of an attack by wolves or leopards. Though several such shelters may stand in small clusters, and the inhabitants use the same spring and graze their cattle on the same pastures, *resa* can hardly be described as settlements. Never more than one or two persons will sleep there and the scanty utensils they take gives their stay the character of casual camping. Yet the stone walls of *resa* are privately owned, even though the pastures on which they stand are communal property. Most cattle-owners possess a fairly large number of *resa*, but use each shelter only for a few days a year.

## **From chapter 2, "A Farming Pattern Based on Transhumance" (pp. 43-58)**

### **Animal Husbandry**

While agriculture has always provided the Sherpas with the bulk of their food supply, the breeding of yak and other cattle adds much-needed protein to their diet, and until recently it also allowed them to engage in a profitable trade. Traditionally ownership of yak is moreover a source of prestige. As late as 1957 a herd of yak was considered one of the most important status symbols, and the care of cattle was considered a manly and honourable occupation. Rich men, who would never put their hand to a hoe or a sickle, unhesitatingly underwent a good deal of hardship when they took their herds to the high pastures and spent weeks and months in the discomfort of primitive *yersa*-dwellings. To own a herd of yak was the aim of many a socially ambitious man, and several of the Sherpas who had worked as high-altitude porters for mountaineering expeditions invested their savings in yak.

Notwithstanding the high prestige value of yak-breeding and its place in ritual, which is unparalleled by any comparable significance of agriculture, it would be misleading to think of the Sherpas foremost as a pastoral people. Whereas every Sherpa family engages to some extent in agriculture, yak-breeding was always only one of several economic choices, and there were wealthy men who preferred to apply their energy to trade rather than to animal husbandry. Some idea of the place of yak-breeding in the traditional economy of the Khumbu region can be gained from a cattle census which I compiled in 1957. It is accurate as far as Khumjung, Khunde, Phortse, Pangboche and Namche Bazar are concerned, but slight errors may have crept into the figures for the cattle owned by the people of the Thamichok area. To make the census understandable, we must anticipate briefly the description of the various types of domestic animals bred by Sherpas.

Yak (*bos grunniens*) is the long-haired bovine typical of Tibetan and other highlands of Central Asia. The Sherpas refer only to the males as *yak*, while they call the females *nak*, a term differing from the Tibetan term *dri* for female yak. Yak can be crossed with other cattle such as the Tibetan cattle (*bosaurus typicus*), the bulls of which the Sherpas call *lang* while Nepali speakers refer to them as *khirkoo* bulls. The resulting male cross-breeds are known in Sherpa as *zopkiok* and the

female cross-breeds as *zum*, the Tibetan terms being *dzo-po* and *dzo-mo*. Cattle of the type occurring in the lower regions of Nepal and in India (i.e. *bos indicus*) are described here simply as ordinary bulls and cows.

In 1957 there were in Khumbu among a total number of 596 householders 187 owners of yak and cross-breeds as well as 67 owners of cows. The total number of cattle was 2,894 while the human population of Khumbu was 2,205. The detailed figures of the cattle census are given in the table below:

| Village      | Cattle-owners | male yak | female yak | male cross-breed | female cross-breed | lang | cows | Total |
|--------------|---------------|----------|------------|------------------|--------------------|------|------|-------|
| Khumjung     | 33            | 14       | 333        | 24               | 15                 | 13   | 56   | 588   |
| Khunde       | 28            | 2        | 316        | 35               | 2                  | 17   | 16   | 416   |
| Tengboche*   | 1             | --       | 23         | 4                | 2                  | 1    | --   | 31    |
| Milingbo     | 5             | 2        | 20         | --               | 3                  | --   | 8    | 38    |
| Pangboche    | 33            | 2        | 228        | 7                | 2                  | 3    | 12   | 287   |
| Phortse      | 36            | 16       | 454        | --               | --                 | 8    | 17   | 531   |
| Namche Bazar | 28            | --       | 40         | 238              | 50                 | 1    | 48   | 405   |
| Jaro         | 3             | 1        | 25         | --               | --                 | --   | 4    | 33    |
| Thamichok    | 91            | 2        | 647        | 79               | 27                 | 27   | 72   |       |
| area         | 258           | 39       | 2086       | 387              | 101                | 70   | 233  | 3174  |

\* All the cattle of Tengboche belong nominally to the abbot of the monastery.

The figures of this table reflect significant differences in the cattle economy of the various villages. The greatest number of male and female yak owned by the inhabitants of a single village--Thamichok being an area consisting of several villages--was found in Phortse, a village of only 59 households. The people of Phortse concentrated on yak breeding more than those of any other village, and engaged very little in trade. Namche Bazar, on the other hand, had, despite its greater wealth, only 40 female yak, but 238 male cross-breeds. Some of these were kept as pack animals, but the majority, though in the possession of people of Namche Bazar at the time of the census, were intended for export to Tibet. Among the 33 cattle-owners of Khumjung there were only 17 men who owned herds of yak while 16 owned only ordinary cows, and the corresponding figures in Khunde were 26 and 2. Thus only 17 out of the 108 householders of Khumjung were fully involved in the type of cattle-economy which necessitates seasonal migrations to the higher pastures and the ownership of houses and meadows in widely dispersed localities. Those owning cows only found adequate grazing fairly close to the main village, and their movements ranged over a much smaller area. It is possible for a family engaged mainly in agriculture to keep a few cows without having to acquire holdings in *yorsa*-settlements. Such cows are based mainly on the village, and only during the time when there are standing crops and all cattle are banished from the village, will some members of the family take them to a nearby camp with some *resa* shelters, where the cows can graze outside the prohibited zone. The keeping of cows carries neither the prestige of yak-ownership nor does it necessitate the adoption of the semi-nomadic life led by those who tend a herd of yak. In some cases it may be the first step to the ownership of a mixed herd, but there are many men who lack the ambition to breed yak, but find it nevertheless convenient to keep a few cows or female cross-breeds as a domestic source of milk.

The Sherpas' cattle economy used to be determined by the fact that most breeders aimed not only at the maintenance or gradual increase of their herds, but that livestock was bred mainly for the sake of the profits resulting from the sale of calves. These profits were highest in the case of cross-breeds, and Khumbu, where yak and ordinary cattle thrive equally well, was in a favourable

position to cater for the demand for cross-breeds which existed both in Solu and in Tibet. . . .

Cross-breeds are valued because they combine certain desirable qualities of pure yak and pure oxen. They are hardier and more sure-footed than pure oxen, and can stand the climate of Tibet nearly as well as yak. Female cross-breeds give more milk than female yak, and male cross-breeds are more useful as pack-animals than pure yak; because unlike the latter they do not suffer from the lower altitude and warmer climate of areas such as Solu, but are nevertheless capable of carrying loads across passes of 18,000 feet.

[. . .]

The composition and growth of herds can best be demonstrated by examples, and the following figures relate to the herds of two men of Khumjung.

Dorje Ngungdu owned in 1957 eight female yak and one bull; one of the yak was 21 years old, one 8 years old, three were 6 years old, one was 5 years old, and two were 4 years old. The bull was 3 years old, and was soon afterwards killed by a leopard. In 1955 four female cross-breed calves and two male cross-breed calves were born and were all sold; in 1956 three calves (one yak, one female cross-breed and one male cross-breed) were born and sold. In 1957 four calves were born, but three died and only one female cross-breed calf survived.

Aila, one of the richest men of the village, and a very careful breeder, owned 1 male yak, 25 female yak, 2 male cross-breeds, 2 female cross-breeds, and 1 bull. Of the female yak seven were 10-11 years old, eleven 7-8 years old, and seven 3-4 years old. The number of calves born and sold were:

in 1955 4 female cross-breeds, 6 female yak, 2 male yak born;  
and 4 cross-breeds sold;

in 1956 6 female cross-breeds, 1 male cross-breed, 2 female yak  
born; and 7 female cross-breeds and 1 male cross-breed sold;

in 1957 4 female cross-breeds, 4 male cross-breeds, 2 male yak,  
3 female yak born; and 3 female cross-breeds and 2 male  
cross-breeds sold; 3 calves died.

These figures are fairly typical of the smaller and the larger type of herd, and it is apparent that in both cases cross-breeds were quickly disposed of. The heavy death rate in 1957 was due to an unusually hard and long winter, a winter during which some less careful cattle-owners lost half of their stock through starvation.

In the rearing of calves a difference is made between those of female yak and those of female cross-breeds. The former are the more valuable and hence are allowed all their mother's milk for the first month, and at least half of the milk during the second and third months. Female cross-breeds on the other hand, are milked even during the first month after giving birth, for their calves are less valuable. Male calves (*tolmu*) particularly are of little value, and are slaughtered in the months of November and December. The useful life of a female yak is about eighteen to twenty years, during which time she gives birth to about fourteen to sixteen calves.

## **The Economic Use of Cattle**

While the sale of cross-breed calves results in the greatest return for the labour involved in keeping a herd of yak, the cash earned in this way is by no means the only profit a Sherpa derives from the ownership of cattle. Indeed it is likely that long before there was a trade in cross-breeds, Sherpas depended on animal husbandry for a substantial part of their subsistence.

Milk products play an important role in Sherpa diet. Fresh milk is not drunk in large

quantities, except perhaps by lonely herdsmen having little else to eat, but curd is a highly valued food, and the butter-milk remaining after the churning of butter is regularly drunk. Most of the milk is used for butter making, and in this respect there is no difference between the thick, creamy milk of yak and the milk of cross-breeds and ordinary cows. Butter is never made from fresh milk, but the milk is first boiled, and then put into a pot with a little addition of old curd, and covered with a cloth. By the next day fermentation has set in and the resulting curd is poured into a churner and some hot water is added. It is then churned with a wooden churner which is vigorously pushed up and down, but not twirled. When the butter has formed into lumps, it is taken out of the butter-milk, cleaned in water and then stored in leather bags, or nowadays sometimes in kerosene tins.

The remaining butter-milk is either drunk or boiled until it becomes solid and forms a kind of dry cheese known as *sherkam*. This is either eaten fresh or kept in a leather bag for later use. Some people break the *sherkam* into small pieces and dry these on mats in the sun. The pieces become very hard and can be preserved almost indefinitely. This hard substance is called *churbi* and is carried on journeys, when it is chewed and gradually dissolved in the mouth.

Another and much more valuable preserve made of milk is *korani*, milk dehydrated by slow boiling till it assumes the consistency of toffee. A great deal of milk is required to produce a small quantity of *korani* and only in the houses of rich cattle-owners is a little occasionally made as a luxury food.

The main effort of all cattle-owners is directed towards the production of butter. Great quantities of butter are needed for domestic as well as for ritual use. Butter is eaten with or as part of all the more highly valued food, it is used as fuel in the butter-lamps lit in the course of Buddhist ceremonies, and is moulded into various shapes for the decoration of sacrificial dough figures (*torma*). Butter is used also as a medium for the payment of wages, and once formed an important article of trade eagerly sought on the Tibetan market. In Khumbu there is seldom a surplus of butter, however, and most of the butter which was exported to Tibet across the Nangpa La came from Solu, where the pastures remain free of snow during most of the winter, and there is less emphasis on the rearing of calves.

In Khumbu a female yak yields only about 15 lbs of butter a year, because the milk production of yak is low and limited to about five months in a year. Cross-breeds produce on an average two litres of milk a day, and in Khumbu the yield of butter per animal is about 20-25 lbs, while the Solu Sherpas reckon with a yield of about 40-45 lbs of butter. In Solu many calves of crossbreeds are deliberately starved and allowed to die, because their value is small and cattle-owners want to utilize the mothers' entire yield of milk. Sherpas resort to the device of starving calves because as Buddhists they are averse to killing outright, and in Solu there are no butchers of *hyawo*\* class.

The second major produce of yak is their hair. Yak are shorn once a year, usually in June or July. Sherpas have no shears or clippers, and the scissors used by some tailors are never employed for shearing yak or sheep. The usual method of shearing yak is to seize a bundle of hair with the left hand and cut it with a razor-like knife. The fine wool, on the other hand, is plucked, and at the time of the year when the yak naturally lose their winter coat it comes out quite easily. Cross-breeds do not have long hair and are not shorn. Both the long, coarse hair of yak and the soft wool are used for weaving blankets. The former makes more durable blankets, and these sell for much higher prices than the blankets made of the soft wool. Ropes used for tethering cattle and for tying up and fastening loads to pack-saddles are also made from the coarse, longer hair of yak. About once in two or three years the hair of a yak's tail is also cut. A herd of about thirty yak yields annually enough hair for about two superior blankets and one of inferior quality. Only the fine, soft wool of

young yak up to two or three years old, is used for weaving material for making clothes.

Though Sherpas are not supposed to kill any animal, they freely eat the meat of animals which are killed accidentally or slaughtered by others. Professional butchers (*hyawo*) used to come once a year from Tibet, and there were also some living in Namche Bazar. In 1971 I heard that others had settled in Thami, and it thus seems that people of Khumbu depend no longer on butchers coming for short periods from Tibet. In the month of November when the pastures dry up, and the feeding of the cattle with hay has begun, yak between lie ages of fifteen and twenty-one are slaughtered, and the meat partly eaten fresh, and partly hung up under the roof where during the cold of the winter it keeps for a long time. But if an animal has to be killed or dies in the summer the meat is cut into strips and smoked over a fire. The skin of yak is treated with salt and then softened with butter, and is finally used as leather for the soles of boots. Many yak are killed by wolves and leopards, and whatever meat can be recovered is eaten. Sherpas have no prejudice against the eating of such meat and they are altogether rather insensitive to the smell of high meat.

There are two ways of distributing the meat of a slaughtered or accidentally killed animal. If a yak has been killed by a wild animal or has fallen to its death, the owner usually spreads the news that he has meat to sell, and neighbours and friends then buy some pieces for cash. But if an old yak, cow or sheep is to be slaughtered the owner is more likely to sell the whole animal to a *hyawo*, who does the slaughtering and then hawks the meat making a profit by selling individual cuts. As long as there was an open frontier between Tibet and Nepal some *hyawo* even brought dried meat from Tibet and sold it to the Sherpas.

Another type of food provided by yak is their blood, which on occasions is drawn from the living animal. Sherpas maintain that they bleed their yak not so much for the sake of their blood, but in order to improve the animals' health or to cure barrenness. The operation is comparatively simple, though skill and a steady hand are required. The animal is first fettered and tied by its horns to a tree or post. A rope is then fastened tightly round the animal's neck, and the operator pierces the artery with a sharp, iron instrument resembling a small skewer. The blood streaming out is caught in a wooden or iron bowl, and as much as about two pints of blood may be drawn. As soon as the instrument is pulled out the small wound closes automatically, and the animal, appearing to be none the worse for the ordeal, is released and rejoins the herd. The blood is then mixed with salt and a little water, and left to stand until it solidifies. It is then cut into pieces and either fried or boiled. Alternatively it may be mixed with *tsampa* before it solidifies, and then baked on a heated stone slab like buckwheat bread.

Besides contributing milk, meat and blood to the Sherpas' diet, and providing hair and wool for blankets, yak served as the principle means of transport in the trade with Tibet, and are still used as pack-animals in the seasonal migrations between main villages and subsidiary settlements. Both male and female yak as well as male cross-breeds are used for carrying loads, and the normal weight worn by any of these animals is two bags each weighing between 50 and 60 lbs. They are easy to handle and two men were sufficient to take a pack-train of ten or twelve animals on a trip across the Nangpa La. Yak and cross-breeds are also yoked to the plough, but for this work they have to be trained and the number of men who own plough-animals is limited.

## **Seasonal Migrations**

Periodic movements from pasture to pasture are an essential element of the Sherpas' cattle economy. Their extent and range, however, varies with the size of herds. The owner of a small herd may base his yak for five months in the year on the main village, move with his animals to higher pastures for another five months and spend perhaps two months at one or two *gunsa*-settlements. A man owning thirty or more yak, on the other hand, may keep them only one month out of twelve in the main village, and take them even during part of the winter to some *yersa*-settlements.

This system can be demonstrated by tracing the annual movements of the herds of two

men of Khumjung: Dorje Ngungdu, who in 1957 owned 8 female yak and 1 bull, and Ang Tandin, who owned 2 male and 32 female yak, 1 female cross-breed and 1 bull.

Dorje Ngungdu kept his cattle in Khumjung from November until March, and during that time the animals grazed as long as possible on the surrounding slopes, and from December onwards were fed on hay and the dried stalks of buckwheat stored in Khumjung. In April his son took the herd to Chermalung, a site near some caves half-way between Teshinga and Lapharma. Dorje Ngungdu had a store of hay in Lapharma, which was then still under snow, and he hired men to carry some of this hay to Chermalung to supplement the meagre food found on the pastures which had only just emerged from the grip of winter. In May the yak were driven to Lapharma, where there was even less grazing, but where they were fed on the hay stored in Dorje's house. By the beginning of June new grass sprouted on the pastures near Khumjung and Dorje's herd, like those of other villagers, was brought down and kept at various *resa*-camps above Teshinga and Khumjung.

In July, however, all cattle had to leave the hill-slopes close to the area of cultivation, and part of Dorje's family moved with the yak to their *yorsa*-settlement at Lapharma, where by that time the pastures were covered by a carpet of luscious grass and flowers. After a few weeks herdsmen and herd moved further up to the settlement of Macherma. There Dorje Ngungdu and five other families celebrated the *Yer-chang* rite, which is designed to ensure the well-being of the herds. (c.f. *The Sherpas of Nepal*, pp. 208-210.) During the first part of September the yak remained at Macherma, and the grass on the walled-in meadows was cut and dried. When the hay had been safely stored, the herd was driven down to Lapharma and haymaking began there.

Two members of the family stayed with the yak at Lapharma until the middle of October. By that time the harvest in Teshinga had been completed and the cattle could be moved down to this *guns*a-settlement. In its vicinity there was still ample grazing and when, at the end of October, Khumjung was reopened to the cattle, Dorje brought his yak back to the village, kept them at night in a harvested field next to his house and during the day let them graze on the hill-slopes above the village.

The annual migrations followed by the herd of Ang Tandin ranged over a much wider area and the time during which the thirty-eight animals of this herd could be kept in Khumjung was comparatively short. At the end of October, when all the harvested fields of Khumjung were thrown open to the cattle, this herd too was brought to the village. After less than a month, however, the herd was moved to a camp on the slopes above Teshinga and in December it was driven further down into the Dudh Kosi valley to a place where Ang Tandin owned a cave and had accumulated a store of hay. At the end of February this was exhausted and the herd was moved to Tonbo, a single-house settlement on the way to Lapharma, where there was also a store of fodder. Already in April the herdsmen moved further up to Lusa to feed the yak on the hay accumulated there, and May was spent partly in Macherma and partly in Phangar, a settlement close to the upper end of the Dudh Kosi valley. In June the herd was driven to Gokyo, a *yorsa*-settlement at an altitude of over 15,000 feet on the shores of a glacial lake, and there it spent a whole month, partly feeding on a store of hay and partly on the new grass. In July Ang Tandin's son brought the herd down to Lapharma and in August the whole family assembled in Phangar for the celebration of the *Yer-chang*. From there the herd once more moved down to Lapharma where it spent most of September and in October it was taken first to a settlement near Teshinga and then for one week to the village of Phortse, where Ang Tandin owned a house and some fields. >From there,

herdsmen and herd moved to Khumjung for the year's only extended stay in the main village.

A calendar based on these and other grazing cycles appears roughly as follows:

|                    |  |
|--------------------|--|
| October/November:  | herdsmen and herds come to the main village, grazing on nearby slopes and harvested fields.<br>small herds remain in main village; large herds stay at low-lying |
| November/December: | camps or settlements at a small distance from the main village. Feeding with hay and buckwheat stalks begins.  |
| December/January:  | as above; substantial feeding with hay and buckwheat stalks.   |
| January/February:  | as above; feeding on hay and buckwheat stalks continues.<br>small herds remain near the main village; large herds are driven                                     |
| February/March:    | to high <i>yersa</i> -settlements, though these are still under snow; the yak are fed on the hay stored there.   |
| March/April:       | small and large herds are kept at high <i>yersa</i> -settlements and fed on hay.   |
| April/May:         | all herds are taken to pastures of medium altitude.<br>large herds move to high pastures; some   |
| May/June:          | small herds are brought for a short time to the vicinity of the main village.  |
| June/July:         | general move of all cattle to the high pastures.   |
| July/August:       | all cattle remain at pastures of high altitudes.   |
| August/September:  | return of all herds to pastures of medium altitude.  |
| September/October  | cattle remain at pastures of medium altitude.  |

We see from this calendar that large herds can be kept in and near the main villages for not more than about four months in the year, while for small herds this period can be extended to about five and a half months. Thus, for the greater part of the year, herdsmen have to live at considerable distances from the villages where they have their large and comfortable houses. In many cases the tending of a yak herd is taken in turn by the owner and his grownup son, or perhaps by two brothers living in a polyandrous marriage. But there are families where one man spends most of his time with the yak, and during the greater part of the year pays only brief visits to his home in the main village. The discomfort such men experience is mitigated by reasonably well-built houses in the various *yersa*-settlements where they live for many weeks not only in the pleasant weather of the summer months, but often even in the intense cold of February and early March.

The difficulty and strenuousness of this life of frequent movement from one *yersa* to the other induces many an elderly man, lacking young sons to take his place with the herds, to sell his yak and to manage either without cattle or have only a couple of cows or female *dzo*, which can be kept in the village all through the winter and entrusted to a herdsman friend for the time when all cattle are to be driven to the high pastures.

It is not unlikely that the decision to change the emphasis of a family's economy from cattle-breeding to agriculture is made more easily now than before the introduction of the potato had enhanced the potential productivity of the land near the main villages.

## **Changes in Animal Husbandry**

Whereas the agricultural activities of the Sherpas have undergone only minor changes resulting mainly from the shortage of labour, the pattern of animal husbandry and its role in Sherpa economy



has altered very considerably. In the past breeders aimed not only at the maintenance or gradual increase of their herds, but relied also on the profits resulting from the sale of calves. These profits were highest in the case of cross-breeds, for Khumbu, where yak and ordinary cattle thrive equally well, was in a favourable position to cater for the demand for cross-breeds which existed in Solu, in Tibet and in such regions of Western Nepal as Manangbhot and Mustang.

As long as there was an open frontier between Nepal and Tibet trade in cattle occupied a central role in the business of Sherpa merchants. This trade was based on the import of young female yak from Tibet, and the sale of Khumbu-born cross-breeds to Tibetans, who did not themselves produce such cross-breeds, but valued the males for the sake of their carrying capacity and the females on account of their high milk yield. The number of males exported every year via the Nangpa La, the pass leading from Namche Bazar to Tingri in Tibet, was about 600, and the number of female yak imported by the same route only slightly less. In 1957 the price obtained for a male cross-breed in Tibet was about R300 while a female yak could be bought in Tibet for R120 and sometimes even less. The Sherpas of Khumbu not only sold crossbreeds to Tibet, but also to the Sherpas of the Solu region and to Bhotias in such distant parts of Western Nepal as Manangbhot, Mustang and Thak Khola. They took them there via Tibet, avoiding thereby the trek through the middle-ranges of Nepal where the environment and climate are unsuitable for yak and even cross-breeds.

Nowadays this cattle trade has been strangled by the restrictions imposed by the Chinese rulers of Tibet. The export of female yak from Tibet is forbidden and the Chinese rarely permit Sherpas to sell male cross-breeds. Moreover, the Chinese do not allow the transit of men and cattle from Khumbu to the Sherpas' old markets in Western Nepal. For all these reasons the breeding of cattle for sale has become less profitable and this is reflected in a change in the size and composition of herds kept by the people of Khumbu.

In 1957 there were in the village of Khumjung 33 cattle-owners and the total cattle population of the village consisted of 14 yak bulls, 333 female yak, 24 male cross-breeds, 15 female cross-breeds, 13 *kirkoo* bulls and 56 cows. The corresponding figures in 1971 were 32 yak bulls, 194 female yak, 39 male crossbreeds, 98 female cross-breeds, 13 *kirkoo* bulls, 40 cows. The great reduction in the number of female yak is explained by the fact that no more female yak are imported from Tibet, and that Sherpas prefer to produce cross-breeds. The number of female cross-breeds has dramatically risen from 15 to 98. The reason for this increase is the fact that several families have given up the keeping of yak which have to be taken to the high pastures and are more difficult to herd, and instead keep cross-breeds mainly as a source of milk. These can be kept in the village for the greater part of the year. The increase in the number of male cross-breeds may be partly due to their growing use for ploughing. I have no ready explanation for the increase in the number of yak-bulls, but it may be that the presence of larger numbers of Hindu government employees in Namche Bazar is inhibiting the slaughter of yak, a practice frowned upon by the Nepalese government because, for religious purposes, yak are classed with cows and cow slaughter is forbidden in Nepal.

Several Sherpas who used to own herds of yak told me that they had switched to the keeping of cross-breeds because they lacked the men to look after the yak in the high pastures. Herdsmen, who as late as 1957 could be hired for an annual wage of R120 plus food and clothes, are now difficult to obtain. Previously the unmarried sons of yak-owners took a share in the herding, but the increasing involvement of many younger Sherpas in mountaineering and tourism deprives their families of their services as herdsmen. Those men who have given up cattle-breeding are no longer in need of the houses and meadows in summer settlements and while some were able to find purchasers for their holdings, others are leaving their houses and potato plots unused. On the other hand, the owners of cross-breeds still use meadows in the nearer *yersa*-settlements. They cut the grass and carry the dried hay on their backs or on pack-animals to their main village. . . .

The comparative figures for the cattle owned in 1957 and 1971 indicate only a moderate move away

from the breeding of yak but the actual trend is probably even stronger. For many of the present yak owners are conservative elderly men, while very few of the younger householders are interested in the breeding of yak. Hence the number of yak owned by Khumbu people may decrease even further in the foreseeable future.

#### Notes

\*The lowest class of Tibetan society, from which butchers are recruited, is called *yawa* or *pang-bo*; *hyawo* is the Sherpa term for members of this class.

*Source:* Christophe von Fürer-Haimendorf, *Himalayan Traders: Life in Highland Nepal* (London: John Murray, 1975).