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GOAT RAISING AMONG THE SAN IN THE CENTRAL KALAHARI

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ABSTRACT In this paper, the goat raising practices among the San are analyzed with particular reference to the technical and socio-economic aspects. Each of the 35 camps of the ≠Kade area had goats. The number of goats in a camp varied considerably, from 8 to 440 goats. The San have techniques to identify she-goats and their kids and young goats to castrate the adult males. Goats are raised not only to be exchanged for shoes, donkeys, radio sets, or horses, but also to be sold to merchants visiting from outside the area. The goats kept in the corral of a camp do not necessarily all belong to the members of the camp. Some people have their goats consigned to other camps. Such consignment relationships serve to further confirm and strengthen the social relations, between the consignor and the consignee, throughout a large part of the Central Kalahari Game Reserve.

Key Words: San; Botswana; Hunter-gatherers; Goat Raising; Consignment Relationships.

INTRODUCTION

The San (Basarwa) are well-known as hunter-gatherers who have adapted to the arid environment of the Kalahari Desert in southern Africa (Lee, 1979; Tanaka, 1980; Silberbauer, 1981). However, recent studies revealed that they have had long standing historical contact with the Bantu farming people, and that some have even raised goats and cattle (Denbow, 1984). In the Dobe area in the northwestern region, there was a San who rented cows from the agricultural people (Lee, 1979). Tanaka (1985) described goat raising by the Central Kalahari San around 1965: "They made a corral with acacia logs as they camped to keep in the goats during the night and let out in the morning to graze." It is certain that many San lead a nomadic life with goats, as well as engage purely in hunting and gathering. In the ≠Kade area of central Botswana, goat raising has been promoted by the government as part of the settlement policy and agricultural training since 1979 (Tanaka, 1987). Thus, while some of the San population have a long history of goat or cow raising, more San are raising livestock in recent years.

Although it is not clear when goat raising began, an examination of literature reveals that some G//ana San raised several dozen goats in the ≠Kade area in 1967 (Tanaka, 1971). Later, in 1982, some had from several dozen to over 200 goats in the !Koi!Kom Settlement (Osaki, 1990).

In 1984, goat raising was promoted according to government policy, and goats were distributed to the families in the !Koi!Kom settlement (Tanaka, 1987). Sugawara (1991) pointed out some features of goat ownership among the G/wikhwe San in 1987. Except for these reports, goat raising practiced by the San

has not received much attention. Neither the details of the management nor the socio-economic significance of goats in San life has been fully described in any studies.

In this paper, the goat raising practices among the San are studied, with particular reference to the technical and socio-economic aspects. By describing these aspects, I will elucidate the nature of the rapid transformation of San goat raising as well as the relationship between the San and the Bantu, the agro-pastoralists who introduced goat-raising to the San. The research was carried out in the ≠Kade area, in the Ghantsi District of the Republic of Botswana for five and a half months from August 1987 to mid-January 1988. The data were collected mainly in a G//ana San camp, where goats have been raised for many years.

The !Koi!Kom is a large sedentary settlement located within the Central Kalahari Game Reserve, and is about a four to five-hour drive from Ghantsi. In the past, about 200 San used to lead a nomadic life around this area. When the government provided a well in the late 1970s and water became constantly available, many San people gathered around the well (Tanaka, 1987). About 800 people lived here in October 1987. Of these, about 200 came to live only in the dry season to utilize the water source. The residents can be classified into two types of peoples, the San and the Kgalagadi immigrants. The San includes two dialect groups, the G//ana and G/wi, who are similar to each other. The ratio of the G//ana, G/wi, and Kgalagadi is 1: 2: 1.

The residents depend greatly on maize flour which has been distributed as a relief food against the drought that had lasted for 6 years since 1980. Primary means of subsistence are hunting, farming, and goat raising. Cash income is obtained by wage labour in road construction and production of folk crafts. The number of goats raised here is about 2,700, which exceeds the numbers of other livestock such as horses and donkeys. Not only have the residents started to put goat milk in tea, but they have also begun to make use of goats in various aspects of socio-economic life in the settlement.

SPATIO-TEMPORAL ASPECTS OF GOAT RAISING

In Botswana, two breeds of goats are found: the Tswana species, with drooping ears and good quality meat, and the larger and heavier Boers species (Watson, 1983). The goats found in this area are the former. In this section, I will elucidate the spatial aspects of goat raising, the distribution of herds, the difference in the number of goats among different camps, and such temporal aspects as change in the number of goats and inheritance.

In the ≠Kade area, there are 35 goat herds. Some camps have a fence around the herd, but others do not. Figure 1 shows the distribution of goat herds in !Koi!Kom Settlement. Many goat herds are concentrated in the central area, where a water supply for livestock is located, and the rest are sporadically distributed within a 4 km area southeast from the center. Almost every day, each herd travels radially about 5 km from this point. The grazing fields consist of woodlands with some acaciatarees, shrub fields, and grassland. The terrain is totally flat.

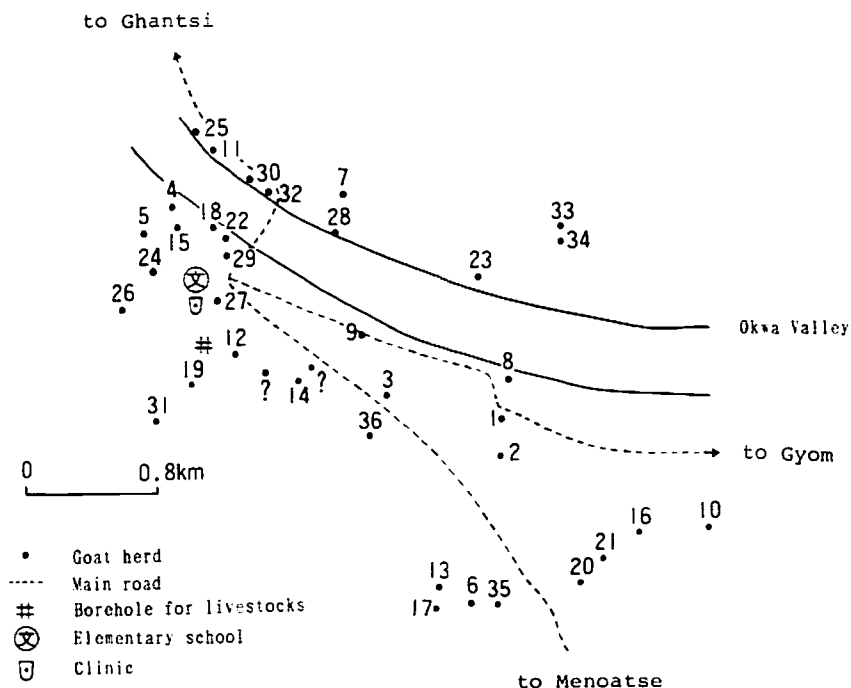


Fig. 1. The distribution of goat herds in !Koi!Kom Settlement.

There is a large difference in the number of goats among camps, ranging from 440 in Camp 1 to only eight in Camp 32 (Fig. 2). The average number of goats per herd is 86. The variation is conspicuous among language groups: the G//ana (Camps 1, 4, 7, 8, and 11) and the Kgalagadi (Camps 2, 3, 9, and 10) possess more goats than the G/wi (Camps 25, 26, 28, and 31). The majority of goats belonging to G/wi Camp 6 were consigned by the Kgalagadi. This difference in the number of goats raised may reflect the difference in the history of goat raising between the G//ana and the Kgalagadi, who raised goats from before they settled in the ≠Kade area, and the G/wi, who started to raise them in recent years.

The variation in the number of goats needs to be examined diachronically. The number of goats held in this area was very small around 1970, but there was a rapid increase thereafter, to about 500 in 1982 (Osaki, 1990) and about 2,700 in 1987. The increase from 1970 to 1982 was largely due to the fact that the G//ana, G/wi, and Kgalagadi, with goats, came to settle in this area. The increase from 1982 to 1987 was probably due to such factors as the promotion of goat raising by the government since 1984, cash income obtained through road construction labor, and the selling of folk crafts.

The G//ana and the Kgalagadi have rules regarding great inheritance. For example, M of the G//ana, who had the largest number of goats in the area, was the eldest son born to a Kgalagadi father and a G//ana mother. He inherited the goats owned by his father. His father, an important figure in this area, had owned horses and guns from before hunting with guns was banned.

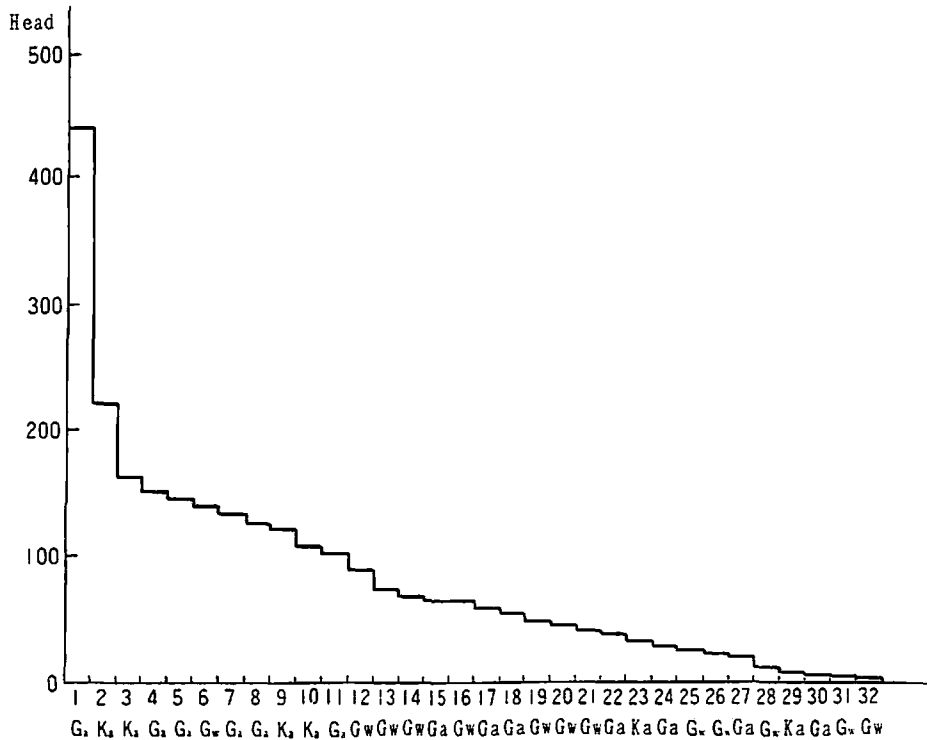


Fig. 2. The number of goats in each Camp. Camp numbers from 1 to 32 correspond to goat herds shown in Fig. 1. Ga=G//ana, Gw=G/wi, Ka=Kgalagadi.

In the case of the G//ana who are intro-married with the Kgalagadi, assets are often bequeathed by the father to the eldest son. In the case of the pure-blooded Kgalagadi, assets are bequeathed to brothers before the death of the father. The reason why such a difference emerged between the two groups is not clear. However, it is very probable that the first San who raised goats were those with Kgalagadi ancestors, who possessed goats on the paternal side.

THE TECHNICAL ASPECTS OF GOAT RAISING

The technical aspects of goat raising will be analysed from two viewpoints: the age-sex composition of goat herds, and goat management (and breeding). The latter will be divided into the everyday chores of herders and the chores that arise during the growth of a goat.

I. Composition of Goat Herds

In Camp 8, there is a semi-circular goat fence enclosing an area, adjacent to a hut, with a diameter of about 15 m. This fence is made of thorny acialogs laid

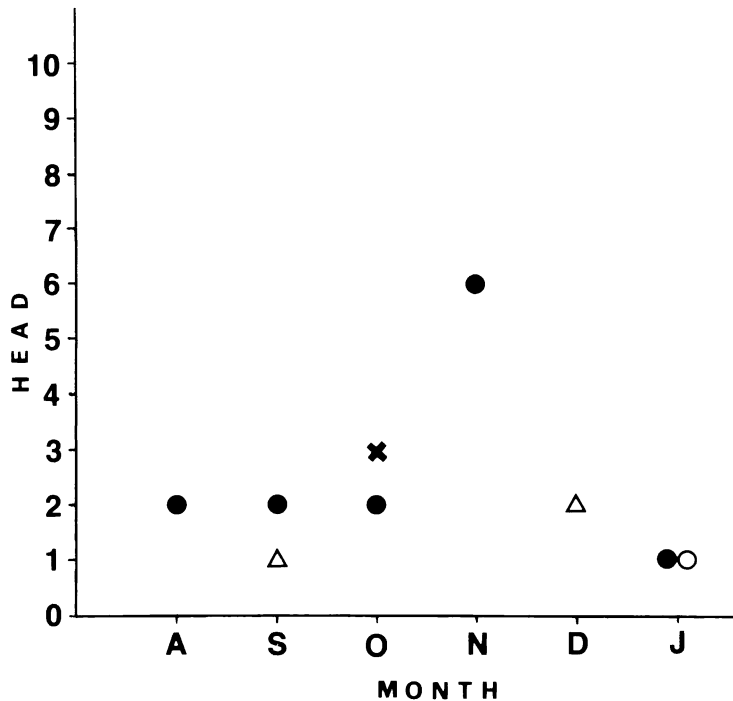


Fig. 3. The fluctuation of the number of goats in Camp 8 from August 1987 to January 1988.

horizontally on the ground so that even people cannot get over the fence. The number of goats kept in the corral was about 130. Here, the fluctuation in the number of goats and the characteristic sex and age of the goats will be compared with that of other ethnic groups.

Figure 3 shows the fluctuation of the number of goats in Camp 8. In this herd, one out of every nine births between August and January resulted in death, three went missing, and three were slaughtered within five months.

On the other hand, four goats were transferred in from another camp, and four were transferred out or sold. In one case in which a goat was sold to another camp, an owner chose a castrated he-goat for the sale, which will be described in detail later. There were three generations of female goats in the herd, while the corresponding second generation male goats had been selected for sale. The composition of the herds changed not only through natural fluctuation due to births and deaths, but also through sales.

Let us compare the sex and age composition of goat herds of the San with that of goat herds raised by the Turkana and the Samburu pastoralists in Kenya. For the San, there are 32 males and 66 females for every 98 goats. A stud male is called *pooko* and a castrated male is called *poloo*. As clearly indicated in Table 1, the sex ratio is not so different from that of the goats kept by the Kenya pastoralists, but the San have a higher proportion of castrated goats. This indicates that the San have a stronger tendency to keep castrated males for sale and for food. The percen-

Table 1. Age-sex composition of goat herds.

	San	Samburu	Turkana
Herd Number	1	2	1
The average number of goats per herd	86	53	198
Age-sex composition (%)			
Nulli-castrated Male	3	3	2.5
Castrated Male	19	6	10
Young Male	6	23	6
Parous Female	31	41	36
Young Female	27	19	28.5
Infant	9	14	16
Obscure	5		

Source: Sikano (1984) for the Samburu, Ohta (1982) for the Turkana.

tage of multiparous female goats kept by the San is slightly lower than that of the pastoralists, but the proportion of juvenile females is higher.

The composition of goat herds is influenced both by the natural growth and death rates of the goat and human exchange and sales. The high proportion of castrated males in the San goat herd is remarkable.

II. A Day of Goat Raising

It takes a great deal of ⁽¹⁾time to chase the adult group out of the corral, separating them from the young and, then, to return them to the corral at the end of the day. It should be noted that no herder accompanies the herd going out to graze. Female goats and their offspring lie side by side during the night and get up in the early morning. They are chased out of the corral between 6: 00 and 9: 00 a.m. At that time, the men or women of the camp, separate the adult goats from the young (Photo 1). One person removes the entrance trapdoor and chases out a



Photo 1. Herders separate the mother goats from their offspring.



Photo 2. A goatherd cover a mother goat's nipples with goat feces.

mother goat. The young try to follow the mother, but other persons intercept to separate them from the mother.

Given some simple direction by the herder, the adult group goes either to the west, where there is a water supply or to the northeast, where there is grass. Goats hastily head for the grazing ground, sometimes via the water supply, because there is no grass around the fence. Several minutes after the goat herd advances to about 100 m away from the corral, the group of young goats are released. Even though the goats are left to graze freely without a goatherd, mother goats and their young do not reunite other because young goats graze near the camp. During the rainy season, however, grass is available near the corral and it becomes difficult to separate the mother goats and their young. Therefore, during this season, the people cover the mothers' nipples with goat feces so that its young cannot suckle (Photo 2), and release them together to graze.

In the case of M, who keeps 450 goats without goat fences, three or four children yell "Toribi (Go!)" at goats, or throw wooden sticks or stones at them, to gather the goats scattered in the vicinity. Then, two or three people line up to form a wall through which goats are let out one by one, thereby separating the mother goats and their young.

Young goats forage and rest near the camp during the day. The shade of huts (or even of my car) serves as resting places to keep out of the heat. Some San bring water from the water supply to give to the young goats. They chase away the young goats owned by others with whistles and give water only to their own. I observed a similar situation where a hunter gave water only to his own hunting dogs used in. These examples may indicate that in their society, a sense of ownership regarding livestock is distinctive even though the communal ties within the camp are strong.

The adult goat herd return to the camp between 5: 00 and 7: 00 p.m. Mother goats and their young approach each other hastily and reunite. The young goats

suckle. A few people of the camp then gather the small group of mother goats and their young into the corral. The herder milks the goats in the corral. In my camp, about a glassful (about 200 ml) was milked from a few goats. The goats to be milked the next morning are tied to a tree 7 or 8 m from the corral so that the young goats will not suckle. A typical day of goat raising ends in this way.

III. Techniques Used during the Growth of Goats

Three events are important within the life history of the goats: castration, birth, and when young goats or newly transferred goats are made to join the adult herd.

The San have careful techniques to separate mother goats and their young, to castrate males, and to deal with the seasonal change and births of goats. The majority of such techniques probably came from the Kgalagadi who originally introduced goat raising. A goat becomes used to its herd gradually, after getting lost several times. Even adult goats can become used to a new herd more easily than expected.

In my camp, four male goats were castrated in mid-January. A herder slashed the scrota, took out the testes, and gave them to his dog. The goats moaned a little, but did not bleed much. The female goats about to give birth were taken out of the herd and tied to trees near the camp. Goats give birth to one or two young. The umbilical chord is not cut by the humans and the infants goats start walking and suckling within 24 hours.

As an example of the course of a goat's life from the time of birth until the time it joins the adult herd, let us look at one kid called Gaenkonakxae, meaning, crying like a steenbok, (here after referred to as Gaen) by the camp members though most goats have no name. Gaen was a female goat born on August 21, 1987. Shortly after birth, Gaen was tied by one of its forelimbs and kept in a hut all day. When the mother came back from grazing in the evening, Gaen could suckle. In early October, Gaen joined the juvenile herd, but was missing on October 13. A herder searched for her in the nearby camps without success, and worried that she might have been eaten by a jackal.

Gaen was found on October 19, but again went missing in the evening. The next morning, M of the neighboring camp came carrying Gaen, which had been in his herd. Gaen finally got used to her own juvenile herd after two months. Horns began to appear on Gaen's head on January 3. She was put in the adult herd on the 6th and went out to graze. Gaen's mother began to be milked about this time. Thus, this goat took two months to get used to the juvenile herd, and four months to join the adult herd.

The following is an example of how transferred goats get used to a herd. On October 20, C bought a male goat from R and brought it forcibly to Camp 8. This goat was reluctant to go out with the adult herd, but finally followed the herd as a result of the goatherd's efforts. Since this goat was not familiar with the grazing ground of the Camp 8 herd, C was worried that it might return to the original herd, but it did not. Because goats are gregarious, new individuals seemed to become used to a new herd quicker than expected without much effort by the goatherd.

On the other hand, I also observed a case of a goat returning to its original

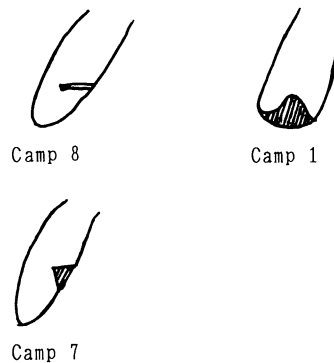


Fig. 4. Ear marks to indicate goat affiliation of camps. Oblique lines show the part cut by owners.

herd. On December 30, a female goat transferred to a Kgalagadi as compensation for a goat killed by B's dog returned to B's Camp 8. The next morning the Kgalagadi came to retrieve the goat. It is possible that this she-goat missed its offsprings or other original herd members and wandered away.

Goats often go missing for one reason or another, and finding them is also an important job for a herder. During my study period, there were seven such incidents in Camp 8, and members of the neighbouring camps visited Camp 8 more than ten times looking for their goats. Goats are occasionally located. Their ears are cut to indicate their camp (Fig. 4). For example, a goat roamed into Camp 8 on October 27, and the people knew that it did not belong to them because of the cuts on its ears. They left it alone, because they knew that the owner would come looking for it.

THE SIGNIFICANCE OF GOATS IN THE ECONOMIC AND SOCIAL LIFE OF THE SAN

The San put goat milk in tea, their favourite drink, and sometimes eat goat meat. In Camp 8 three goats were slaughtered during my study period. On September 27, a male goat transferred from Q was slaughtered to be eaten. On December 18, a female goat, belonging to P, married and absent from the camp, became blind and could not feed on her own, and so was slaughtered. On December 25, Christmas day, C slaughtered a male goat purchased with cash. Although members of my camp are not Christians, it became a custom to eat goat meat to acknowledge Christmas. Goat meat is eaten occasionally in several camps, but it is still very rare for the San to eat goat meat.

As mentioned above, the main food source is the maize flour distributed by the government, so the proportion of goat meat or milk in their diet is low. In the next section, I will analyze the significance of goats from two different perspectives: the economic aspect, where goats are used in the exchange or sale of goods, and the social aspect, where goats connect people. The existence of goats deeply pervades

the lives and society of these people.

I. The Economic Value of Goats

Goats in the life of the San are raised not only to be exchanged for shoes, donkeys, radio sets, or horses, but also to be sold to merchants visiting from outside of the area, and are purchased as savings for emergencies.

I was stunned when Q paid me back the 40 pula I had lent him by giving me a female goat. I did not know then that goats were used as a cash substitute. He borrowed from me to pay a fine to the police, for causing injury to his wife. The couple had separated as they did not get along well.

There were other cases in which goats were used in place of cash, such as when purchasing horses, donkeys, or radios. One goat is equivalent to a pair of leather shoes, two goats to a donkey, and four goats to a radio. A horse is equivalent to 400 pula in cash and three goats.

One particular goat was given by A of Camp 8 to his son in Camp 14, transferred to a Kgalagadi in Camp 3 as a part of the sum to pay for horses and donkeys, to a G/wi in Camp 20, then to a Kgalagadi in Camp 9, and finally back to a G//ana in Camp 8. In the ≠Kade area, goats are treated almost as the equivalent to cash in purchasing goods.

Goats also serve as assets. The San purchase goats with the cash they earn from road construction work and the production of folk crafts. When they need cash, they sell their goats. When Q was in serious need of cash, he sold a goat for 30 pula to a Kgalagadi in Camp 9 and borrowed cash from me.

Although A did not need so much cash, he sold two goats for 30 pula each to a merchant who came from the town of Ghantsi by car to buy goats on Christmas day. These goats had been given to A's daughters, G and N, who were away, but A decided to sell them. It seems that the father retains the right to sell goats given to his daughters. This was an interesting case that may reveal an essential feature of the goat "ownership concept" of the San.

II. The Social Value of Goats

The owners of the goats kept in the corral do not necessarily live in the camp. Those who live outside the camp often consign goats to others for goat-keeping. In the herd of Camp 8, the ratio of goats owned by outsiders to those owned by residents was 5: 3. I will clarify the social value of goats in building connections between people by describing the details of the goat consignment relationship.

I observed five goats forcibly tied and separated from the herd at M's camp who owned the largest number of goats in the !Koi !Kom Settlement (Photo 3). When the group moved back to their original village at the onset of the rainy season, after a stay in !Koi !Kom during the dry season, M consigned his goats to be kept at Gyom. The consignee received the right to milk the goats and use the milk freely, and was given a juvenile female goat from the litter born to the consigned goats during the consignment.⁽²⁾ The consignor keeps his goats in different areas, resulting in more effective goat raising in the ≠Kade area, which is almost overgrazed



Photo 3. Five goats forcibly tied and separated from the herd.

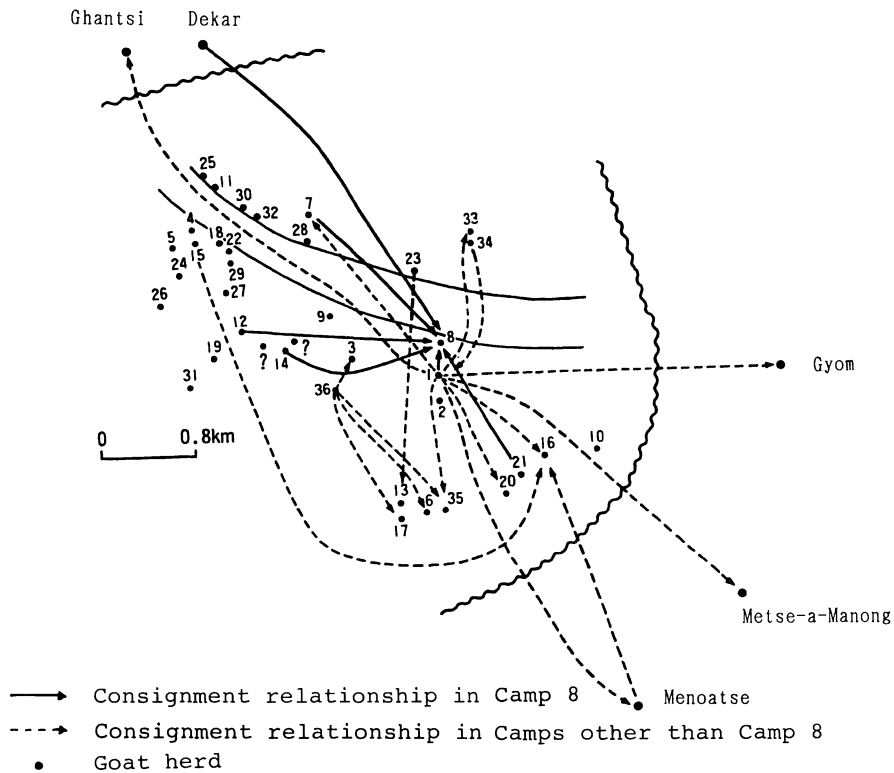


Fig. 5. The consignment relationship among goat herds.

because of the rapid increase in number of goats.

Figure 5 shows the consignment relationship in terms of goat herds in Camp 8. Such undertakings are entered into by the residents of Camps 1, 7, 12, 14, and 21 and of Ghantsi farm, about 200 km from the ≠Kade area. These relationships are established between relatives, such as father and daughter, in-laws, such as father and daughter's husband, or other acquaintances. Verbal requests usually establishes a consignment. I know of cases where residents of other camps purchased or were given goats but left them in Camp 8. There was also a case in which a young woman from Camp 8 married a man from Ghantsi Farm and left the ≠Kade area without taking her goats with her.

Extensive surveys throughout the Central Kalahari Game Reserve revealed that such consignment relationships were observed among many camps, and that this network extended over a geographical distance of 140 km (Fig. 5). For instance, M, with the largest number of goats in this area, had some of his goats with the spouses of his own children and also had some Kgalagadi living in Gyom, Metse-a-Manong, and Menoatse to keep his goats, about 140 km from ≠Kade. A Kgalagadi in Menoatse kept many goats in some G/wi camps in the ≠Kade area. M and the Kgalagadi living in Gyom had a kin relationship, but the others were merely friends.

When I travelled through the Central Kalahari Game Reserve with O of G//ana, we went to see his goats consigned about 100 km from ≠Kade. He had a G/wi, his wife's father in a G/wi camp, keep his goats. He pointed at the goats, saying, "This is the goat I gave to my daughter, and that one is mine." He also said, "My goats are doing fine. I am going to give a male or female goat to the man who looks after them."

I was not able to ascertain what process was involved in the rise of the consignment relationship among the San. However, it should be noted that the goat owners of the G//ana consigned goats to the G/wi. The goat consignment relationship involving goats was observed among the G//ana, who were middle-scale owners, and among the small-scale G/wi and G//ana owners only within the ≠Kade area. The large-scale G//ana or Kgalagadi owners consigned their goats in the game reserve area, some more than 140 km away.

These consignment relationships have an important social function in the relationship between people and to reinforce the ties between people. The process and the status of people revolving around goats are important when we consider the changing life of the San in recent years and their relationship with the Kgalagadi.

CONCLUSION

The purpose of this paper is to answer two questions: how the San keep goats, and what the socio-economic role of their goats is.

While the San continued to depend upon hunting and gathering until recent years, many have kept goats. In current goat raising, the San utilize techniques such as separating mother goats and their young and castration in order to deal thoroughly with seasonal change and the births of goats. Goats are seldom utilised

for food, but used often as a substitute for currency to purchase valuable goods. In other words, goats play a role similar to money. And throughout the consignment relationship, goats are adopted establish relationships with people not only within their community but also throughout the Central Karahari Game Reserve.

Considering the technical, social, and economic aspects of goat raising among today's G//ana, we must clarify two elements: one that has arisen from the long contact with the Kgalagadi, and the other that has emerged from settling in one fixed place in a developing commercial economy. The technical and social aspects of goat raising have a long history, and the economic aspect and the consignment relationships over extensive areas have been influenced largely by their settling in one place. The example of a G/wi receiving a young goat as reward for raising the goats consigned by a Kgalagadi shows a remarkable similarity to the example of cows raising by the !Kung San in the Dobe area, as reported by Lee (1979). However, it seems to be a phenomenon peculiar to the ≠Kade area that large-scale goat owners emerged from the G//ana-speaking group and established consignment relationships with the Kgalagadi and G/wi.

As I have described, goat raising plays an important part in the social life of the San. As the number of goats owned differs greatly, there is a possibility that the scale of the consignment relationships will grow, and that stratification and social ranks which have previously been unclear may emerge in the San society. We must conclude that some G//ana and G/wi have raised goats for the last several decades, and that nowadays herd Ownership and the consignment relationship produce a social network covering a large part of the Central Kalahari Game Reserve occurring under the influence of the formation of a large community and the development of a commercial economy.

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NOTES

(1) Kent (1992: 51) stated that the Kutse Basa-wa spent only about 2 hours/week caring for goats and 20 hours/week for hunting.

(2) Sugawara (1991) analyzing the keeping-and-entrusting relationships of goats in Camp 20, 21 (Fig. 5), pointed out that a G/wi consignee did not receive any juvehile as his reward. Thus, the compensation for keeping the goats may vary according to the kinship and the social relationship between the consignor and the consignee.

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