

Introduction : Pastoralists and Their Neighbors : Perspectives from Asia and Africa

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Introduction: Pastoralists and Their Neighbors: Perspectives from Asia and Africa

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THE FRAMEWORK OF INTERACTION BETWEEN PASTORALISTS AND THEIR NEIGHBORS

Pastoralists have shown a remarkable resilience and adaptability to recent changes in their lives and livelihoods, including loss of pastureland to farmers and urban areas, increased commoditization, and the out-migration of poor pastoralists to urban and settled areas. Nevertheless, the majority of the world's pastoral peoples continue to rely on their domesticated animals to provide both daily food, transportation, and products to trade. An essential part of the pastoral strategy involves taking advantage of the mixed social milieu that many pastoralists live in, by trading, exchanging, or allying with neighboring groups including foragers, farmers, townspeople and occasionally other pastoral groups. These relations may become competitive and lead to conflict over resources, a situation exacerbated by population growth and loss of grazing lands in certain areas of the world (Fratkin 1997; Humphrey and Sneath 1999).

The interaction between pastoralists and their neighbors has been discussed in a variety of ethnographic studies, of peoples from sub-Saharan Africa (Bollig 1987; Little 1992) and the Middle East (Giant and Khazanov 1998; Meir 1997; Salzman 2004). Whereas anthropologists have studied African pastoral societies since Evans-Pritchard's (1940) *The Nuer*, anthropological studies of pastoral peoples in the former USSR as well as those of post-socialist Russia and Mongolia are more recent, and focus on problems of both collectivization and the collapse of Soviet rule after 1991 (Anderson 2000; Ikeya 2003; Humphrey 1983; Swift and Mearns 1993; Sneath 2000). Nevertheless, pastoral society and economy tend to be studied regionally and rarely outside demarcated continents (with some notable exceptions including Barfield 1993; Fabietti and Salzman 1996; Galaty and Johnson 1990; Khazanov 1994).

This volume is based on papers presented at an invitational panel discussion of "Pastoralists and their Neighbors" organized by Kazunobu Ikeya of the Senri National Museum of Ethnology in Osaka for the inter-congress of the International Union of

Anthropological and Ethnological Sciences (IUAES), held in Tokyo in September 2002. This panel assembled scholars researching the contemporary situations of pastoral peoples in Russia, Mongolia, China, Nepal, India, Sudan, Kenya and Botswana (Figure 1). Pastoral peoples in these countries practice a variety of livestock-keeping strategies, and are affected in different ways by particular state policies, histories, and marketing conditions. Yet, several features held true for all these groups, including the importance of livestock in local economies, the importance of continuing access to rangelands for pastoral viability, the importance of social and economic ties to non-pastoral neighbors, and shared problems of the political marginality of pastoral populations vis-à-vis national governments. This volume focuses in particular on the social, economic, and political relationships between pastoralists and their non-pastoralist neighbors, including hunters, farmers, urban populations, and state institutions. In so doing, these studies consider interactions including barter, commercial trade, stock consignment systems, employment systems, and legal struggles.

Who are pastoralists? Pastoralists are people whose livelihood depends mainly on the raising of domestic animals including cattle, camels, goats, sheep, yaks, horses, and donkeys, which are used for milk, meat, wool, hides, transport, and trade; in addition, many pastoralists cultivate crops or have long-standing trading relations with agricultural neighbors. (Swift 1988 defines pastoralists as populations deriving at least 50% of their livelihood from domestic livestock). Pastoralists occupy savannas, arid deserts, high plateaus, or sub-arctic forests and tundra where rain-fed agriculture is difficult or impossible. Barfield (1993) traced the distribution and organization of pastoralists in an arc from East African cattle herders (including Maasai, Nuer, and Turkana), to North African and Arabian camel herders (Tuareg, Bedouin, and Beja), Middle Eastern sheep and goat pastoralists (Baluch, Basseri, Turkmen), Himalayan yak herders (Tibetan Drokba), horse nomads of the Central Asian steppes (Mongols, Kazakhs), and reindeer pastoralists of Siberian and Scandinavian forests. In addition, we find Fulani cattle pastoralists in the grasslands of Africa's western Sahel, camel herders in India's Rajasthan, and camelid keepers (alpaca, vicuna, and llama) in South America highlands (Galaty and Johnson 1990).

Pastoralists typically occupy large tracts of communally-shared land and utilize kinship ties for mutual herding and defense. Their herds are often large, in poor condition, but hardy enough to survive periodic drought and sparse vegetation. Many pastoralists practice some agriculture; they may also supplement their pastoral diets with wild plants, game, fish, grains and other food commodities purchased by the sale or trade of livestock, milk products, and hides. Some pastoral societies engage in long distance trade, such as the Tuareg of the western Sahara, while others such as the Maasai practice localized livestock-keeping in semi-permanent settlements (Fratkin *et al.* 1994).

Unlike commercial ranchers, who raise a limited number of animals solely for market offtake in confined areas, pastoralists rely on their herds for daily subsistence. Pastoralist diets consist of milk, meat, and blood obtained from their animals, and cereals either grown or obtained by trade of their animals. In East Africa, milk and milk products account for 60–65% of dietary energy and herds are typically 66% female.

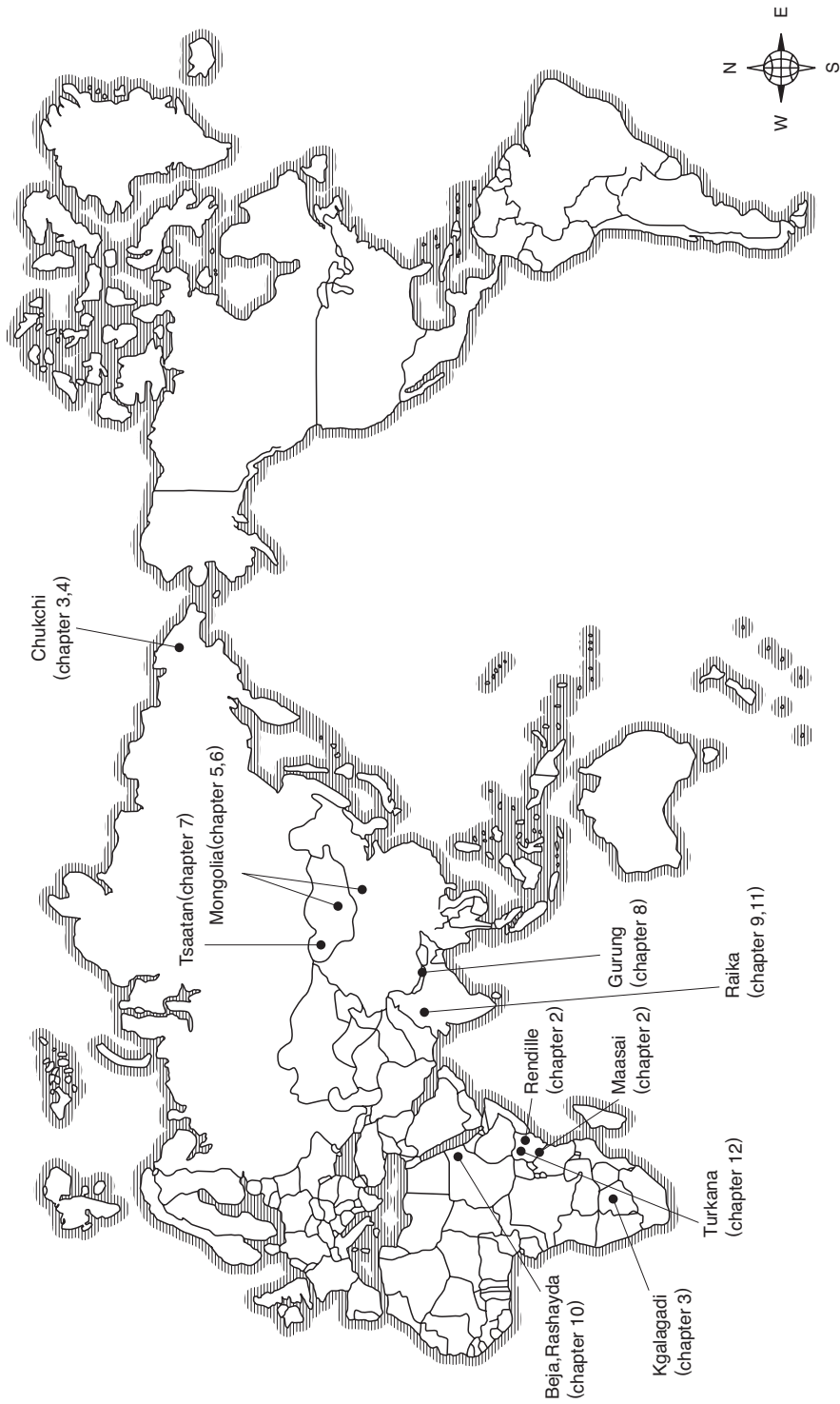


Figure 1 Case studies included to in this volume

In the Mideast and Central Asia, trade of wool provides the necessary income to purchase grain; market routes and transport of goods have long been a part of pastoral life. Relying on their herds for daily food, caloric intake is low, although protein consumption is higher than that of most agriculturalists (Sellen 1996). Pastoralists generally have low body mass indices (wt/ht), reflecting chronic energy deficiencies (Galvin and Little 1999). Despite the nutritional hardships of pastoral diets, they are sufficient to allow pastoralists to survive in arid lands that are too marginal to support agriculture (Little and Leslie 1999). Populations that abandon livestock-keeping for life in towns or farms often suffer worse nutritional hardships, particularly the loss of protein from milk and meat, resulting in worse malnutrition, especially for children (Hill 1985; Nathan *et al.* 1996).

Pastoralists have undergone substantial social change in the 20th century, in response to pressures from national governments to sedentarize, and to the problems of population growth and environmental decline. Soviet models of governance in the former USSR, Mongolia, and China engendered large-scale collectivization of pastoral production, where livestock were managed by communes or state farms, with the human populations largely sedentarized into towns or permanent villages (Khazanov 2004). In many parts of the Middle East, nomads were seen as lawless and threatening to state security. They were either forcibly settled, as attempted by Reza Shah in Iran in the 1930s, or marginalized by increasing urbanization and commercialization (Salzman 2004). In East Africa, pastoralists suffered both from prolonged droughts in the 1970s and 1980s, and from policies fostered by international donors, including the encouragement of private ranching models (Galaty 1994).

A guiding philosophy of many international development programs aimed at pastoralists was Garret Hardin's (1968) "tragedy of the commons" thesis, which held that traditional pastoral practices of individual owners utilizing communally shared pastures were wasteful and inherently degrading to the environment. Local governments were encouraged to curtail pastoral livestock production on communally held lands and promote private ranching for beef and dairy resources, because private landowners were assumed to better conserve their resources. The actions of governments curtailed pastoral mobility through alienation of land, demarcation of grazing boundaries, and mechanization of bore holes, which encouraged pastoral sedentarization. Moreover, governments displaced local authority over range and water use, decreased effectiveness of sanctions, and facilitated manipulation by the wealthy and influential (Fratkin 1997; Brokensha and Little 1988). Whereas these policies have long been in effect in Kenya and Tanzania, they are now being practiced in Mongolia, China, and Kazakhstan (See Janzen, Ozaka, this volume).

Traditional pastoral production demands mobility, the *sine qua non* of dry land cattle keeping, as the main means of maintaining herd productivity. During the 1980s and 1990s, social scientists and rangeland ecologists questioned the 'tragedy of the commons' model, and pointed out that arid lands are typically unstable and pastoral practices including mobility, herd diversity, and household production based on a limited number of laborers, have acted as measures against overgrazing (Coughenour *et al.*

1985; Scoones 1994). Moreover, pastoralists seek to expand their herds, not out of an irrational love of cattle, but because herders typically lose over half their animals during periodic drought, a situation that has occurred every 5–6 years in the past three decades in East Africa. Nevertheless, these criticisms fell on deaf ears (cf. Dyson-Hudson 1991): pastoralists were encouraged to “modernize” and abandon traditional herding practices. By the 1980s, East Africa’s livestock sector was worse off than at any point in history, despite investments of about 1 billion dollars between 1970 and 1984.

This volume is intended to compare the interaction of pastoralists and their neighbors in two geographic contexts – East Africa and Central Asia. The rationale for this comparison arises both from the significant amount of research on pastoral societies in these two regions, and from the particular similarities and differences between these regions. Both East Africa and Central and northern Asia contain large areas of semi-desert, grasslands, and steppes (and in Siberia, Taiga forests) that are more suitable for mobile pastoral livestock production than for sedentary agriculture. Both regions are characterized by large numbers of livestock managed by traditional, i.e. household-based, pastoral societies, the majority of which practice mobile livestock-herding. Finally, both regions are undergoing rapid transition to market economies and commoditization of livestock, which are having mixed effects on herding families. Because of the free market, some former pastoralists have gained wealth through privatization and capital intensification; others have left the pastoral economy in search of jobs in towns. Others have reverted to a subsistence-based strategy in areas where markets are rare or unstable.

The two regions are also quite different. Africa, for the most part, is a culturally heterogeneous region with a polyethnic and multi-specialized community. Many pastoralists live among or near sedentary agricultural populations or urban areas, or have themselves settled near towns or adopted agriculture. Relations with farmers, townsmen, and even foragers are an established tradition in African countries, although periodically and more frequently these inter-ethnic contacts have led to conflict and competition. Central and northern Asia, on the other hand, are characterized by expansive grasslands with relatively small, mobile, and highly-specialized pastoral populations. Farming communities are rare. Where they exist, as in Inner Mongolia, China, they are relatively new to the pastoral regions. Nevertheless, these pastoralists have long had extensive trade relations with large and settled agricultural populations, as well as with hunters in the northern taiga forest, in relations that go back several thousand years. The situation is different in South Asian communities such as Rajasthan, where pastoralists graze their livestock between and among both agricultural and urban areas.

An important difference between Asian and African pastoral situations is their political economy: Inner Mongolia (China), Mongolia, and Kazakhstan experienced widespread sedentarization and collectivization under socialist regimes. In these socialist (China) and formerly socialist countries (Mongolia, Kazakhstan) countries, pastoral lands were managed collectively or by the state, which made significant contributions in terms of fodder, veterinary care, transportation, and marketing in these regions. When



- Type 1: Pastoralist, Hunter, (Trader)
 Type 2: Pastoralist, Pastoralist, (Trader)
 Type 3: Pastoralist, Farmer, Townspeople (Trader)
 Type 4: Pastoralist, Urban-dweller

Figure 2 Types of relationships of pastoralists and other populations

collectivization in Mongolia and the former Soviet republics ended abruptly in 1991 (and less abruptly but no less significantly in western China with economic liberalization), pastoral populations found themselves adrift in the globalized sea of increasing commoditization and privatization of the livestock economy. These are similar conditions that African pastoralists have endured for the past several decades. For that reason, the comparison continues to be useful.

The interaction of pastoralists and their neighbors can be understood from several perspectives, including human ecology and political economy. Human ecology examines how the human population utilizes physical resources to survive, and how they interact with other human groups, including cooperation, trade, and intermarriage on one hand, or competition, subjugation, and warfare on the other. We can clarify four types of resource interactions including herder-hunter (Type 1), herder-herder (Type 2), herder-farmer (Type 3), and herder-townspeople (Type 4) (see Figure 2). These relations are contextualized in a political economy framework, particularly in relation to state structures and interventions. While these interactions vary both geographically and historically, they are sufficiently represented in Africa, the Middle East, and South, Central, and Northern Asia, as exemplified in the contributions to this volume. These offer fascinating and in-depth glimpses into the lives of pastoralists today, with a strong ethnographic description situated in a comparative framework.

In Chapter 2, Fratkin compares the situation of pastoralists in East Africa to those

in Central Asia, looking in particular at the problems of the late 20th century. On both continents, pastoralists face problems of loss of land and common property resources, the commoditization of the livestock economy, urban migration, and increasing economic polarization. In Kenya, tourism threatens Maasai herders in the south, while political insecurity and warfare jeopardize Rendille camel herders in the north, leading to increased sedentarization and urban migration. In Mongolia, the collapse of socialist support has led initially to a resurgence of traditional pastoral practices, although more recently, as Janzen's Chapter 5 shows, less than half of Mongolia's herders are capable of subsisting in isolated rural areas.

HERDER-HUNTER RELATIONS (Type 1)

Interactions between herders and hunters are increasingly rare as vulnerable hunter-gathering societies become fewer. But several important examples exist, including cases in southern Africa and northeastern Siberia, as discussed by Ikeya in Chapter 3 and Vate in Chapter 4. Ikeya's chapter compares two distinct herder-hunter relationships, those of San hunters and Kgalagadi agro-pastoralists in Botswana, and Chukchi groups of Siberia. One is a reindeer herding population; the other is a coastal population who hunt sea mammals. Both regions are analyzed from historical and economic perspectives, showing both the trade between herders and hunters, and the dominance of herders over the hunters, as exemplified by the employment of hunters by herders to tend livestock herds. Vate's discussion of Chukchi herder-hunter relations shows how their economic exchanges are embedded in ritual relations between the two groups, which, although independent, are interconnected through exchange, marriage, and shared symbols of their separate rituals. Furthermore, herders attend the hunters' festivals, as do hunters the herders' rituals, encapsulating a moment when the link between the two parts of the society can be expressed.

MONGOLIA: PASTORALIST-PASTORALIST RELATIONS AND RELATIONS TO THE STATE

The situation followed a different course in Central Asia, where pastoralists in Siberia, Mongolia, and western China came under centrally planned socialist systems in the 20th century, which altered local production with collectivization and sedentarization. These same groups underwent further transformations following the breakup of the Soviet regime in 1991 in Siberia and Mongolia, and the introduction of market reforms in China.

The extensive livestock production system of Mongolia in particular has undergone deep changes, as Janzen discusses in Chapter 5. After privatization of the highly export-oriented livestock economy (especially to the former Soviet Union) and the loss of state subsidies for the rural areas, and the breakdown of all marketing facilities, the mobile livestock keepers had to organize their life and production by and for themselves. As a result, the mobile livestock economy was reduced to a highly subsistence-oriented

system with a large number of small production units who must organize pasture use, water supply, veterinary services and marketing of animal products, and who must supply themselves with goods. Access to educational, health, and cultural facilities became very difficult because of lack of financial support by the state. The creation of a large group of so-called “new nomads” with small herds after privatization of livestock production cooperatives has produced a marked social differentiation within the pastoral population: a large group of mainly poor “new nomads” and a small group of newly rich herder families occupying the other extreme. Furthermore, following large scale de-urbanization from urban centers after the 1991 break-up of the USSR, Mongolia’s largest trading partner, many former employees returned to livestock keeping, following older forms of organization. Yet, poor services and a lack of trading opportunities in rural areas have spurred a new urban migration, with many poor and impoverished former pastoralists living in slums outside the few major urban areas of the country.

Ozaki in Chapter 6 compares the situations of pastoralists between northern (“Outer”) Mongolia and China’s “Inner” Mongolia. In northern Mongolia, “other” people means “sedentary” Mongolian people, while pastoralists are mobile and make up 30% of the total population. In Inner Mongolia, pastoralists constitute only 8% of the population, and are distinguished from Han people, who dominate the politics and economy of the region. Inner Mongolia experienced more land crowding, and pastoralists have taken up sedentary living more so than those in northern Mongolia. A shared feature of the two countries is that pastoralists must exchange their livestock or products for necessities of “Mongolian” everyday life – tea, flour, and industrial products. Confined to areas that are remote from cities, the market-orientation of Mongolian pastoralists has a negative correlation with dairy production or milking, as they have less commercial value than livestock – or their valuable ‘cashmere’ wool, tendency. This has led to a decline of milk consumption as consumption of vegetables and grains increases through market exchange, affecting cultural identity along with diet and nutrition.

In terms of animal-herding strategies, a sharp contrast exists between northern and southern Mongolia. In the former, the direction of animal consignment is accumulation to richer, more skillful herders. Employment is rare, while subsistence herding within the *khot-ail* group is common. In Inner Mongolia, mobility is reduced and animals are often dispersed to poorer, sometimes Han, people. Employment is common for the pastoralists, as is the assignment of land to individual households. Such differences reflect relationships between pastoralists and people of each group.

Chapter 7 by Inamura discusses the small population of Tsaatan reindeer herders who live in the mountain taiga area on the northern border of Mongolia with the Republic of Tuva and Russia. Using reindeer for transportation (for riding, draft, and pulling sleighs), the Tuva also hunt wild game for meat and fur, which they trade to pastoral nomads of the steppe for meat from domestic livestock. Since the end of the 1950s, Tuvinians, like other rural Mongolians, were organized as members of “negdel” (cooperatives) and received salaries. Over time, they became more specialized herders as hunting for meat became less important. They subsequently began to buy food in

villages. Since the beginning of the 1990s, when the Soviet era ended, market exchange increased in importance. As did other populations in Mongolia, the Tsaatan herders lost former economic guarantees, including their cash income. One way in which they have adapted is to accept tourists; another is to deal with the steppe nomad people, so that they may trade cows or sheep for food, leaving them with the steppe dwellers.

As Chapters 5 through 7 point out, the lack of a clear development concept for rural Mongolia by the current governments may be contributing to the deterioration of the living and production conditions of the rural population, and the mobile livestock-keepers in particular. The new legal, economical, social, cultural and ecological circumstances have led to a new quality of interrelationships between the herder families themselves, as well as between the pastoralists on one side, and the sedentary population on the other. Dwindling or absent government support has strengthened, kinship relations, and new marketing and supply systems have developed. The pastoral families living in remote areas became highly dependent on migrant traders and their price dictates. As a consequence of the lack of cash in the rural economy, barter is widespread. In addition, insufficient supplementary hay production has led to high livestock losses during the winter and spring of the previous three years, affecting poorer families with few animals and little knowledge of livestock rearing. Poorer families often cannot survive with the small number of animals they possess. Consequently, they carry out services for the wealthier pastoralists. As a result, new forms of dependencies are emerging. Since the mid-1990s, a strong exodus of the rural population, especially from the western areas of Mongolia, has occurred. This out-migration from the rural areas is mainly directed towards the large towns, the capital of Ulaanbaatar in particular, which is now home to over one-half of all Mongolians.

PASTORALIST-PASTORALIST COOPERATION (Type 2)

In Africa and the Middle East, the relationship between different pastoralist groups occupying the same area is often an antagonistic one, particularly if each group herds the same type of livestock on the same grazing and water resources. This was the case of cattle-keeping Maasai groups who fought each other for control of the East African plains in the 19th century (Spear and Waller 1993), the camel-keeping Bedouin of Arabia whose various tribal groups controlled particular water wells (Cole 1975), and Persian sheep-herding groups that competed for dominance in the lucrative wool trade of the 18th and 19th centuries (Chang and Koster 1994).

A fascinating example of inter-pastoralist interaction and cooperation is that presented by Nawata (Chapter 10) on the Rashayda and Beja of eastern Sudan, who collaborate to produce racing camels for Persian Gulf buyers. In the past, relations between these two pastoral groups were competitive and periodically hostile. The Rashayda, immigrants from Arabia who crossed the Red Sea to Eastern Sudan in the mid 19th century, are camel breeders as well as traders, who were formerly engaged in the slave trade from Sudan to Arabia. The Beja (and particularly Beni Amer) are camel pastoralists of eastern Sudan and Eritrea, who often found themselves in competition

with Rashayda for pasture. But the commercial demand for camels from Arabia, and particularly that of racing camels to the oil rich states of the Persian Gulf (and particularly Abu Dhabi in the United Arab Emirates), has provided the basis for an unusual cooperation in breeding camels. The most famous breed of racing camel from the Sudan is known as the Bushar, which are bred by the Beja. Owing to the Rasahayda's long established trading networks between Africa and Arabia, the Beja began to exchange and interbreed camels with the Rashayda, although the two groups remain separate and do not intermarry. The lucrative nature of this trade, where top quality racing camels can fetch an average of \$80,000 and even up to \$800,000, has made allies of these former enemies.

HERDER-FARMER RELATIONS (Type 3)

One of the most important interactions of pastoralists has been with neighboring farmers. Often these relations are based on an ecological symbiosis, whereby pastoralists exchange milk, meat and leather products for grains, vegetables, and manufactured goods from farmers; in addition, livestock can graze on dormant fields while leaving valuable manure. More recently, these relations have resulted in competition when farmers take up livestock production or pastoralists engage in farming, as in northern Nigeria or western China. Watanabe in Chapter 8 describes the trading relationship between shepherds and farmers in Nepal, where Gurung pastoralists trade livestock products in locations where they have set up camp, rather than transporting the products to markets. The Gurung engage in economic activities through the trading of their livestock products, forming social relationships with other groups who inhabit their migration route. This report discusses the processes and social relationships formed by trading wool, sheep, male lambs and sheep manure.

A different situation pertains among the Raika in Rajasthan India, as described by Ikeya in Chapter 9 and Kavoori in Chapter 11. The Raika are sedentary pastoralists living in fixed villages, yet are able to use a wider herding environment for their camels, buffalo, and small stock of goats and sheep. The Raika, once full-time specialized camel pastoralists, have in the past fifty years settled and adopted some cultivation, although they continue to practice nomadic pastoralism for certain of their animals, particularly camels. Income is derived from a variety of sources, cultivation of cotton and dill, sales of camels, sales of buffalo milk and butter, migrant jobs, and shopkeeping. Their herds frequently combine "camels and buffaloes" and "camels and goats and sheep." In addition, some households in the village economy combine breeding of livestock with cultivation of commercial crops including cotton and dill. They also engage in migrant labor to the cities of Mumbai. Indore Buffalo breeding in particular is done with one or more animals owned by each household, where women earn cash incomes obtained by selling milk and butter. Buffalo milk is sold to persons who live in the village and is transferred to the town every day.

From the viewpoint of household income, percentages of buffalo breeding, cultivation, and migrant jobs are high, whereas income from camel breeding is small,

obtained from the market in Pushkar once a year. In some cases, camel sales show a deficit incurred from hiring herders and the cost of medicines. Difficulties for the Raika to secure grazing areas for camels do exist, but herders and hired labor maintain camel herds because of the long tradition of camel-producing villages.

HERDER-TOWNSMEN RELATIONS (Type 4)

Recently some pastoralists have started political movements against government forest policies. Some pastoralists have adapted to the new environment in the refugee camps. Analysis of court records of cases between the government of Madhya Pradesh and Rajasthan flocks reveals that camel/sheep herders are fully nomadic, trading camels and buffaloes from agropastoral villages. The government tried to exact a tax on ‘foreign’ sheep from neighboring Rajasthan and Gujarat, but the Supreme Court upheld the unrestricted rights of pastoralists as citizens of India to move with their sheep through any part of their country.

The nomadic pastoralists of Rajasthan are fighting back for their future, as they organize to engage in a critical legal battle that will either curtail their rights to a nomadic and pastoral life, or mark a first step in a broader quest for legitimacy and co-existence (Kavoori, Chapter 11). That later chapter documents the efforts and constraints involved in the process of pastoral mobilization, while summarizing the legal and administrative perspectives shaping policy. It is suggested that the struggles of pastoralists, although nascent and distinct, have something to learn from the struggles of other environmentally-driven social movements in that country.

Ohta discusses these relationships between the refugee camps and their host population from the viewpoints of marginalization of pastoral societies in Africa and globalization. He explores the dynamic and multidimensional relationships between a refugee camp and its host population, using the case of the pastoral Turkana of northwestern Kenya (Chapter 12).

The camp offered opportunities to the local people of selling such commodities as firewood, charcoal, building materials, milk, and livestock. Some of the Turkana gained employment from aid agencies; others were hired by the refugees to do various odd jobs. Some Turkana women formed marriage-like relationships with refugee men; others were formally married through dowry payments. Many conflicts, sometimes with physical violence, occurred between the Turkana and the refugees, but most of these cases were solved locally. The camp continues to exert profound influences economically, socially, and culturally upon the local people.

Through the series of papers in this volume, we may realize how regionally diverse are the ways of life of those we call pastoralists, and how pastoralists have adapted to the age of economic globalization and the collapse of socialism.

CONCLUSIONS

The model of comparing social interactions between pastoralists and their neighbors follows ecological, economic, and historical criteria. From an ecological viewpoint of resource usage, these relationships may be characterized as competitive (herder-herder, herder-farmer), symbiotic (herder-farmer, herder-hunter, herder-town), or predator-prey (herder-herder, herder-hunter, herder-farmer). From the viewpoint of history and political economy, these relations might emphasize trade and mutual cooperation on the one hand, or competition and political domination on the other. The papers presented in this volume suggest that pastoral societies continue to show resilience, despite the many changes in land use, market economy, and urbanization that are occurring. However, livestock production will probably continue to exist as long as humans demand their products, and as long as livestock pastoralism offers a secure existence to human populations living in arid grasslands, deserts, and tundra regions of the world. Current changes, including rapid commoditization, competition for grazing resources, human and livestock population growth, environmental degradation, and political turmoil and insecurity, will continue to threaten pastoralists and their well-being and security. To this end, pastoralists will continue to maintain, develop, and protect relations with their neighbors, who are an indispensable component of the world that pastoralists inhabit.

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