Drought and Development in Marsabit District, Kenya

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Extensive drought in the 1970s and 1980s prompted national and international development efforts aimed at the pastoralist populations of Marsabit District of Kenya. Famine relief efforts by the Catholic Church and the African Inland Mission contributed to the settling of former nomads and the growth of small towns, while international development efforts, including UNESCO's Integrated Project in Arid Lands (IPAL) focused on range conservation and the improvement of livestock marketing. The sedentarization of pastoralists has led to greater access to health care, education, and other social services, but has also contributed to economic differentiation and rural proletarianization. Local economies are now based on a combination of subsistence pastoralism, livestock marketing, and wage-labor, indicating that the process of sedentarization is a complex one with varying consequences for different sectors of the population.

Marsabit District is Kenya's largest, most arid, and least populated region, inhabited predominately by livestock keeping pastoralists including Rendille, Gabra, Boran, and Somali ethnic groups. Like other regions of Kenya's north, Marsabit District was underdeveloped by both British colonial and independent Kenyan administration, where roads, schools, hospitals, and markets remained among the poorest in the country (O'Leary, 1990; Sobania, 1988). Development in the district accelerated after the major droughts of the 1970s and 1980s, when both western Christian missions distributing famine-relief and international development projects, including UNESCO's Integrated Project in Arid Lands (IPAL), contributed to the rapid growth of towns, the sedentarization of nomads and increased livestock marketing and wage labor opportunities.

When I began research as a cultural anthropologist among Ariaal Rendille in 1974, Marsabit District was isolated with few social services; there were only two secondary schools and two hospitals at Marsabit and Moyale, and the majority of the district's 96,000 residents subsisted off the milk, meat, and trade of their camels, cattle, goats, and sheep. At that time, local pastoralists were recovering from both the extensive drought of 1971–73 and the political turmoil known as *shifta*, an armed conflict between Somali secessionists and the Kenyan government following independence in 1963. Famine conditions existed in many areas of the district, and famine-relief agencies led primarily by the Catholic Relief Services (CRS) distributed maize, soy, and powdered milk at Laisamis, Korr, Kargi, Maikona, North Horr, and Loiyengalani on Lake Turkana. In addition to the Catholic

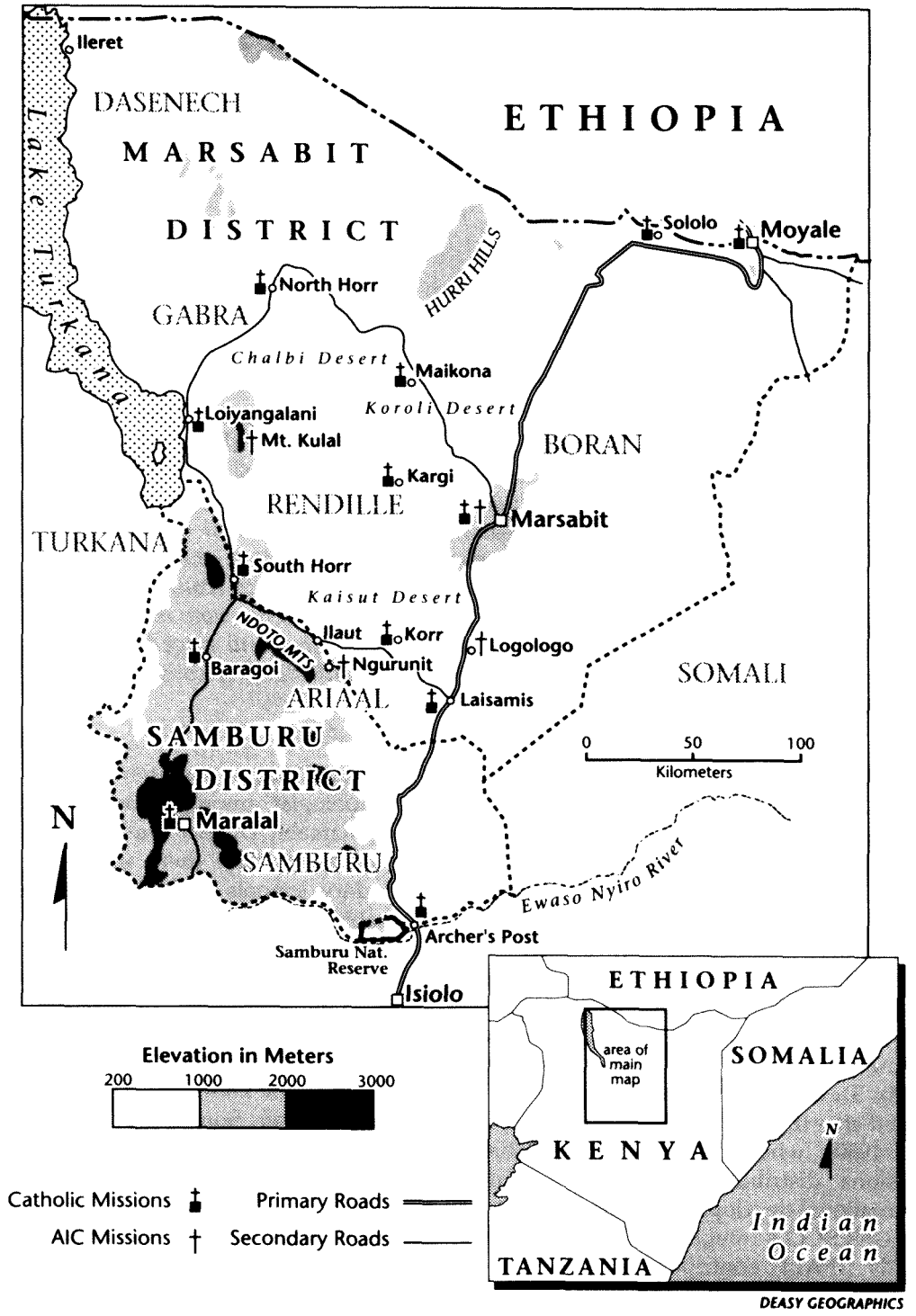

FIGURE 1 *Marsabit District, Kenya*

Church, the evangelical Protestant African Inland Church (AIC) developed missions and water-development projects among Rendille at Logologo, Marsabit, Mt. Kulal, and Ngurunit.

When I returned to Kenya in 1985, a period following the Ethiopian Famine of 1984, Marsabit District had become the locus of international development projects and famine-relief efforts, and had undergone an irreversible change. Permanent towns now existed at locations which had previously been only camel watering holes, such as Korr and Kargi. About one half of pastoral Rendille (pop. 21,000) had settled in or around these mission towns, living on grain purchased from selling animals, famine-relief, or from food purchases from wages paid to herders, watchmen, and laborers. Although many households still owned animals, they were herded in distant camps and ceased providing milk on a daily basis to many of the settled pastoralists (Fratkin, 1989, 1991).

The missionaries and development agencies consciously introduced changes in the local economy and way of life of the district's residents. The policies of the Catholic Church aimed at settling pastoralists in towns, even though there were not enough grazing resources to keep livestock. Similarly, a major objective of the UNESCO-IPAL project was to conserve the environment by reducing pastoral herd size through increased marketing and restriction of the pastoral range. Few planners at UNESCO or the Catholic Church considered livestock pastoralism as the basis of food production in the district, nor that there are few alternatives to it for human subsistence in this arid region.

CHURCH MISSIONS, FAMINE-RELIEF AND THE GROWTH OF SMALL TOWNS

Marginalized by mainstream Anglican and Presbyterian missions under British colonial rule, missionary activity by the Catholic Church and evangelical African Inland Church (AIC) flourished in post-independence Kenya. In the 1960s and 1970s, missionaries from the Catholic Church and AIC poured into the previously restricted regions of the north including Turkana, Samburu, and Marsabit Districts, where they were welcomed by a new Kenyan government anxious to develop water resources, schools and hospitals in the rural areas.

In sheer size, funding, and political clout, the Catholic Church dwarfs other religious missions in northern Kenya. The Diocese of Marsabit administers seventeen churches in Marsabit and Samburu Districts, all with their own schools, dispensaries, and churches; in contrast, the African Inland Church administers four missions in Marsabit District, mainly among Ariaal Rendille.[1] Marsabit Diocese priests, most of whom are expatriates from Italy, Germany, and India, play a major role in the delivery of health and medical care, famine-relief, adult literacy, water development, and education in the district (Diocese of Marsabit, 1987).

The local infrastructure created by the Catholic Church enabled Marsabit District to respond quickly to the drought of 1971–73. The Marsabit Diocese (through the Catholic Relief Services) was responsible for distributing famine-relief foods (maize, rice, soy, and dry milk) donated mainly by the USAID and UNICEF. In 1971, 15,159 people or 16 per cent of the district's population were receiving famine-relief (O'Leary, 1990, p. 162).

One of the largest famine-relief efforts began among the Rendille at the dry-season water holes of Korr and Kargi in the Kaisut Desert. By 1976 these centers were attracting nomadic Rendille to tented camps, which by 1980 had developed into small towns with cinder-block churches, schools, and dispensaries. Shops selling household goods, butcheries, and livestock markets

also developed in these new towns. During the famine of 1984, Korr and Kargi's population had swelled to 9000, nearly one half of all Rendille. By 1990, the populations at Korr and Kargi stabilized to about 2500 permanent residents each, made up of poor householders with few animals, entrepreneurs engaged in the commercial economy, and school students.

The philosophy of the Catholic missionaries focused on the need to settle pastoralists in permanent locations and discourage a 'nomadic' way of life. In this respect, the church shares a view found among both colonial administrators and current government officials (themselves from non-pastoral backgrounds) that pastoralism is primitive, irrational, and wasteful. A priest at Korr told me:

> These Rendille are really children, here today, gone tomorrow. They have no roots, no home to call their own. Here they have for the first time a regular water supply, sanitary latrines, shops, schools, a dispensary. But they have a long way to go before they can be truly independent.

While they may have latrines at Korr, they do not have their animals close by. Many of the Rendille who have settled at Korr are poor, infirm, or elderly with too few animals to support themselves. Occasionally wealthier stockowners will move a second wife and children attending school to the town, keeping other family members with the livestock in distant areas.

While the Protestant AIC missions are not as large as the Catholics, they share similar assumptions about local pastoralism. An AIC missionary from the United States who built the Ngurunit mission among Ariaal, said:

> The Rendille don't have enough sense to see they're killing this area. Two years ago, the water always ran right past the house here. Now they've got their cattle up at the water source and they're destroying the place. Maybe they don't understand cattle, having just started raising them in addition to camels, but its going to kill this area. Tell me, why do they keep cattle at all? I know they say 'cattle is wealth', but I just don't understand it. They want large herds that just keep eating, yet their own children are starving. They come to me for *posho* (maizemeal), and I tell them to sell a cow, but no, they won't sell.

I asked this missionary whether he was not encouraging the overgrazing by developing permanent water access. He replied:

> Yeah, the round robin. And they think we're here just to give everything away. It's the Catholic's fault, they just throw food at the Rendille. Only we don't want babies, we want to make men of them.

Neither AIC nor Catholic missionaries visited local settlements very often, and rarely did they exchange ideas as equals. I discussed my conversation with the AIC with several Ariaal elders. This is how Lugi Lengesen responded:

> It's true that there are more people here now than two years ago. But then Ngurunit was empty, it was *shifta* time. Before *shifta*, we always came to this place, there has always been water for our cattle here, particularly when its dry. The AIC wanted to build a water tap here, but we did not want it because it would bring too many Rendille. It is true the Rendille keep cattle today and did not keep them before. But it is not just the cattle that drink the water here. Did you see that big tank behind the mission house? That is where the water has gone. Two years ago the wells at Ngurunit were one man deep sometimes two men. Now they are three men deep because the water is gone over there. The AIC cannot tell us where we can go and where we cannot go. We come to this place every dry season. We go where we can find grass.

Like the Catholic churches, AIC missions are located at permanent water points where pastoralists gather, and where their activities are most likely to attract converts.

LIFE IN THE TOWNS

The missions at Korr, Kargi, Ngurunit, and North Horr have developed into small towns, with permanent water, medical facilities, and shops for trade. Both AIC and Catholic missions fund health dispensaries and engage in child vaccinations, and both groups are currently experimenting with alternative subsistence techniques such as irrigated gardening, or making efforts to restock impoverished pastoralists. Yet few of these towns have sufficient pasture to keep animals, and the poorer pastoralists who settle at the mission often became permanent residents, without animals and dependent on famine-relief foods or low paying jobs. Patrick Ngolei, a Rendille secondary school graduate and resident of Korr, described life there as follows:

> Before we were nomads, we would move with our animals. Now we stay in one place, at Korr or at Kargi. This is *maendeleo* [development]. Here we have shops, schools, hospitals. But we still keep our animals in *fora* [camp]. When we need money for food we tell our warriors to sell stock at Laisamis, Isiolo, or Merille. They sell them and send us money. But now everybody is paying for things they used to get for free — meat, transportation, milk. People must spend money until the rains come [and milk animals can return]. People must look for work in town, making buildings, cleaning houses, even digging urinals. If there is no work, people must sell an animal. If a person is too poor and has no animals or money, he must beg from others.

Although many pastoralists, particularly those from wealthy households with large camel herds, are able to live with their animals away from the mission towns, others have entered semi-urban life with all its advantages and disadvantages. Prostitution and illegal beer brewing are notorious at Sabamba Village, a poor people's housing settlement built by the Laisamis Catholic Church. But many of the pastoralist youth have entered school in the past fifteen years, and there is a growing number of school leavers finding employment with government services, opening shops, or engaging in electoral politics, winning seats in both local county council elections and the larger national legislature.

Most pastoralists are not opposed to the new influences of the town, but view them as additional resources to utilize. Towns represent an alternative to rural life, particularly for poorer households who have few animals. Furthermore, they are seen as essential centers to gain employment, sell livestock, seek health care, and obtain education for children. A recent study in Marsabit District suggests that health and nutrition have improved for children settled in towns in contrast to those living in nomadic communities (Nathan *et al.*, 1991).

Importantly, towns are providing an easier life for women who in pastoral communities must carry out many tedious and dangerous tasks including herding, fetching water and firewood, and loading pack camels. Furthermore, towns are providing new economic opportunities for women, a significant shift in roles from traditional pastoral life. An Ariaal woman described her life in Ngurunit town as follows:

> I like living here at Ngurunit. There is no water in Lewogoso [the nomadic community], no place to buy food. Besides my husband has a new wife to take care of him and he doesn't need me now. When my cows are here, I can sell the milk and buy what I want. When we keep some of our goats here, I can sell them too. Now I cook for the school teacher's wife and watch their children, and they pay me some money. If my husband tells me to go to Lewogoso, I will tell him I won't go. He will agree because he knows it is drought there and he can't feed all of us. Anyway, he would prefer to take his new young wife. He can't do anything bad to me if I refuse because I have enough animals and, according to our custom, he cannot take my animals from me. I have my own animals and my own children to herd them. So who needs hardship in the bush?

Towns also provide opportunities to local entrepreneurs engaged in the livestock market. An example is Arge, a Rendille businessman living in Ngurunit town. A second son with no inheritance rights to his family's livestock, Arge joined the Ariaal near Ngurunit in 1975 to raise small stock and cattle. In 1978 he gained employment with the UNESCO camp at Ngurunit, herding animals from their experimental herd. Steadily converting wages into his own livestock, by 1984 Arge had built up his own camel and cattle herds to a point sufficient to survive the drought of that year. By 1990, he owned over 90 camels and was a successful entrepreneur running a tourist sightseeing business with plans to open a general merchandise shop. His family had grown from one wife and no children in 1976 to two wives and 9 children, and he had his own family settlement with several brothers and their families living with (and working for) him. Arge's success however must be compared to that of impoverished pastoralists seeking wages at the margins of the town economy.

THE UNESCO-IPAL PROJECT

In addition to the church distribution of famine-relief and the growth of towns, Marsabit's pastoralists have been the recipients of concentrated development activities aimed at improving local water resources, roads, and livestock marketing in the district. The most visible and influential project was the multi-million dollar UNESCO-IPAL project, which established programs in western Marsabit District between 1976 and 1985.

IPAL was initiated in 1976 at the UN Conference on Desertification, held in Nairobi, which was called to address environmental degradation following the Sahelian drought which devastated West Africa from 1968–1973. The project was designed to integrate primary ecological research on 'desertification' with the teaching of practical techniques to enable local populations to halt further degradation. A predominant view at the desertification conference, however, was that environmental degradation of arid lands was caused largely by human mismanagement and overpopulation. Pastoralists in particular were held responsible for the Sahelian drought by their practices of maximizing herd size and overgrazing an already fragile environment (UNEP, 1977). Despite a large number of studies that pointed to economic and political causes of famine (e.g. Horowitz, 1979; Franke and Chasin, 1980), the pastoralist as villain was ingrained in IPAL's program (IPAL, 1976).

It was proposed to create IPAL stations in northern Kenya, Tunisia, and Sudan. An initial budget of US$ 1.1 million was designated for the Kenyan project, with an additional US$ 1.7 million earmarked for later projects. In fact, the Kenya program was the only IPAL project implemented, and by 1986 when IPAL disbanded, it had spent several millions of dollars on ecological research and marketing projects (IPAL, 1984).

From its inception, IPAL scientists saw the reorganization of pastoralist societies as the main way to save the desert ecosystem. 'The main longer term objective [of the IPAL plan is] the investigation and development of economic strategies leading to alternative means of livelihood for the nomadic pastoralists,' wrote director Hugh Lamprey in an early IPAL proposal (IPAL, 1976). It was never spelled out, however, what those alternative strategies would be nor how pastoral populations in arid lands could survive without their animals.

IPAL was never a single project, but a heterogeneous assortment of researchers and administrators involved in different activities ranging from aerial surveys to building roads and digging boreholes. IPAL went through three phases during its ten year existence — a period of ecological research (1976–1980) conducted exclusively

by European researchers on Mt. Kulal, a period of experimental work (1978–1982) carried out by European and African researchers, and a final period (1982–1985) of development activity carried out by Kenyan administrators in which they improved livestock market infrastructure including grading roads, building new wells, and holding livestock auctions.

During the first period of ecological research, IPAL scientists confined themselves on a station high on Mt. Kulal at the AIC mission at Gatab, studying vegetation, climate patterns, geomorphology, and small stock productivity. IPAL also conducted extensive (and expensive) aerial surveys which showed high concentrations of livestock around mechanized wells, confirming their established views of pastoral overgrazing. An experimental veterinary program (the Traditional Livestock Management Project) was briefly conducted among Ariaal pastoralists, and although highly popular, it was discontinued as inconsistent with the basic, rather than applied, research aims of IPAL (Schwartz, 1980).

By the early 1980s, Marsabit's political representatives (including the local Member of Parliament and the District government) were growing impatient with the IPAL's isolated research on Mt. Kulal. A great deal of money was pouring into the district through UNESCO (funded now by Germany) with very little visible benefit to Marsabit's inhabitants. IPAL was reorganized under Dr. Walter Lusigi, a Kenyan ecologist who established a new headquarters in Marsabit town, brought in consultants in education, human ecology, and livestock economics, and supervised a comprehensive development plan (IPAL, 1984). IPAL became highly visible, developing permanent camps, stores, and transportation pools throughout the western district (including Ngurunit, Illaut, Illeret, Korr, and Marsabit).

Although the Kenyan directed IPAL increased interaction with the local population (including hiring local Rendille, Gabra, and Ariaal), IPAL's orientation towards pastoral production retained its original view that there were too many domestic animals on the range. Rather than recommend forced culling or rigid grazing restrictions as his predecessors, Lusigi focused efforts on encouraging pastoralists to sell more animals on the commercial market. In addition, IPAL's Management Plan called for some grazing restrictions to allow rangeland time to recover, the establishment of land tenure through the registration of rangeland through title deeds to 'tribal groups' (similar to the Groups Representatives Act creating 'group ranches' in Kenya's Maasailand), improving public security, extending fixed water points, improving the delivery of veterinary and human health care, and providing banking and credit opportunities (IPAL, 1984).

Most of these proposals were never implemented (improving human and livestock health care, banking services, grazing restrictions), others were only partially established (improvement of roads and water resources). IPAL's greatest success was in the area of livestock marketing, which was carried out under Western Marsabit Integrated Development Project (WMIDPP).

The main idea of WMIDPP was to increase market integration of pastoralists by encouraging their access to and demand for commodity goods (e.g. grains, tea, sugar, cloth, shoes). It was hoped that this basic marketing would lead to an increased sale of small stock and cattle to obtain the cash to purchase more goods. WMIDPP developed mobile shops which visited nomadic communities on camel back, and instituted a series of livestock auctions at Illaut, Korr, and Ngurunit.

The response of local pastoralists was less enthusiastic than IPAL had hoped, however. In a 1980 survey of 30 Rendille households, IPAL (1984, p. 387) found that Rendille sold only 5.2 per cent of their cattle,

no camels, and 7.6 per cent of their small stock annually. My own surveys of Ariaal households showed similarly low offtakes of 4 per cent of cattle and 11 per cent of small stock in 1985. Livestock sales in the 1980s were even less than 1975, when Ariaal communities sold 7 per cent of their cattle and 15 per cent of their small stock. Lower stock sales in the 1980s than 1970s are attributed mainly to the large losses of animals to the 1984 Ethiopian drought, after which pastoralists concentrated on building up their herds (Fratkin, 1991, pp. 45–46).

I believe IPAL's failure to integrate pastoralists more fully into the commercial market was based on their failure to distinguish between the fundamentally different strategies of subsistence pastoralists and commercial ranchers. In a subsistence pastoral economy, female animals are kept for a daily supply of milk, while males are traded during dry seasons to purchase grains; ranchers on the other hand raise male stock for sale, selling young animals in the wet season when their weights are high and condition good. The majority of Marsabit's pastoralists do not raise animals for the commercial market, although typically pastoralists will sell 5–10 per cent of their large stock per year. Increasingly cattle are raised for the market by Marsabit pastoralists, but the marketing of animals still remains low (O'Leary, 1990; Roth, 1990).

IPAL's livestock auctions were unpopular and poorly attended. Pastoralists such as the Ariaal complained of low prices and poor buyer turnout; often IPAL staff were the only bidders. Local shopkeepers, usually Somali families who had lived in the area for generations and had long-established credit arrangements with local producers, complained that IPAL could offer better prices because IPAL subsidized transportation to larger markets at Nanyuki or Nairobi, providing lorries, petrol, and drivers expenses while the shopkeepers had to bear these costs themselves (Tonah, 1988, pp. 63–64).

Ironically one of the most visible benefits of the IPAL project was the employment of local pastoralists for cash wages. Several dozen Ariaal and Rendille men in the Ngurunit and Korr areas held jobs in security, herding, construction, and driving. Stockowners who had lost many animals during the 1982–1984 drought were able to recover quickly by investing their wages in small stock and rebuilding their herds. Dr. Lusigi commented in 1985,

> We thought that paying local people wages for UNESCO work would encourage them to buy goods from the shops and sell their livestock. It had the opposite effect. We did a small survey at Ngurunit and found that the men who worked for us were getting good wages, many for the first time in their lives. Invariably they invested most of it in livestock. So what we were trying to accomplish — to get the Rendille to sell more animals — did not work.

This conversion of wages into livestock reveals an important component often overlooked by development planners, that local pastoralists are buyers as well as sellers in the livestock market. Livestock are important to pastoralists not only as food producers (and essential for immediate survival in arid lands), but the medium of social relations that hold pastoralist society together. Cattle are still the principal component of brideweath among Boran, Samburu, and Ariaal, and livestock are periodically slaughtered at community rituals including age-set initiations and calendrical events such as *sorio* among the Rendille. Livestock exchanges through stock friendships further ensure access to grazing in distant areas, and help build alliances between individuals, households, and whole communities.

Rendille were never equal partners in IPAL's projects, and their attitude towards the project changed in a short time from high expectation to anger and frustration. A Rendille elder who worked for IPAL for

several years said:

> UNESCO came with promises, and they left with promises. They promised to help us market our animals, but they ended up buying our animals for nothing and selling them for their own pockets. They flew around in airplanes and attended meetings in foreign countries, but they made us pay for transporting our animals to market. They refused to take our sick children to the hospital, or provide medicines for our camels. So the question is not what UNESCO did for the Rendille, but what did the Rendille do for UNESCO.

IPAL ended in 1986 after failing to gain the full participation of local pastoralists and traders. Other foreign development efforts continue in the region. The German Development Corporation (GTZ) proposed a camel husbandry project in 1988 as a follow-up to IPAL's Traditional Livestock Management Project, which intends to provide restocking, low cost veterinary care, and training in livestock management. The GTZ project has been delayed as two governmental agencies compete for its sponsorship and copious funding. Other projects include restocking efforts by the AIC at Korr and the Catholic Church at North Horr, as well as improved water development and irrigated farms at Ngurunit and on Mt. Marsabit.

DISCUSSION AND CONCLUSIONS

Although Marsabit District's pastoralists have increasingly settled in or near towns, they have not abandoned their pastoral economy and still depend on their animals for subsistence and trade. While some development efforts have aimed at improving livestock production (including the GTZ veterinary project and the mission-sponsored restocking program), most government development activity encourages further sedentarization of nomads, arguing that town life provides greater food security and access to health care and educational opportunities.

The majority of people living in the mission towns of Korr and Laisamis are poor, many have been driven to settle by the loss of livestock in the droughts of the 1970s and 1980s. Town households which own animals must herd them in distant areas and depend on their sale to purchase food to feed their members. However, there are few economic opportunities other than livestock keeping in the district. Agriculture is a possibility in certain parts of the district, and efforts to develop irrigated gardens represent an important alternative in food production. Agriculture, however, cannot support the majority of the population due to the limited rainfall and finite water resources, and livestock pastoralism remains the most important food production system.

Current efforts by the Ministry of Livestock Development aim at increasing livestock sales and improving the ability of pastoralists to purchase foods. This falls in line with World Bank policies which promote commodity production and marketing in order to provide food security to rural populations during crisis periods (World Bank, 1986, 1990). Yet development planners need to appreciate that poor people sell a larger proportion of their animals to buy food than do the wealthy, and that many of the poor are forced out of the pastoral economy altogether during prolonged drought.

While the improvement of livestock marketing conditions has benefited rich and poor alike, it has enriched local entrepreneurs who control trade, butcheries, and marketing. Economic stratification is developing between commercial producer and subsistence pastoralist, between entrepreneur and hired herder. The polarization of pastoralists into 'haves' and 'have-nots' is a trend reported for other Kenyan pastoralists such as the Maasai, and is occurring in Kenya's north as well. Although Marsabit District has not undergone privatization of the range and the spread of

individual ranches as among Maasai, there are signs that commercial livestock production is concentrating in fewer hands, driving poor pastoralists out of the economy and into towns to seek wage labor at the lowest rungs of the economic ladder (Campbell, 1984; Galaty and Bonte, 1991; Fratkin and Roth, 1990; Hjort, 1979).

Development agencies in Marsabit District need to pay attention to improving the existing pastoral production system, providing assistance to the pastoralist in the same fashion that agricultural aid addresses the farmer. Many studies have suggested appropriate development for pastoral communities, and it may be useful to summarize their main features (Bennett, 1988; Dahl and Hjort, 1979; Horowitz and Little, 1987; Schwartz and Schwartz, 1985).

Pastoral development must include the expansion of veterinary services offering low-cost medicine and training not only to commercial entrepreneurs but to the subsistence pastoralist, which can be achieved only through mobile veterinary clinics visiting pastoral settlements on a regular basis. The restocking of poor herders, both with small stock (goats and sheep) and camels (a highly adapted milk producer in arid lands), is currently carried out by missionaries at North Horr and Korr; these efforts need to be expanded by larger donor programs. While grazing restrictions should not be imposed (as they are impossible to achieve and result in a decline in herd viability), a rational policy of water use and the provision of public security (guaranteeing safety from livestock theft) should be developed. In short, the mobility of herding populations should be encouraged rather than discouraged.

The sale of livestock is important both to the commercial entrepreneur and the subsistence pastoralist alike. The market infrastructure in Marsabit District needs to be improved by making stock routes, auctions, and competitive marketing available to the pastoralist. Cooperatives for transporting and selling livestock should be encouraged, with profits used to hire drivers, veterinary officers, and security. Extension services in education, business and accounting skills, and livestock management need to be increased.

It is unlikely, however, that the pastoral economy can sustain all of Marsabit District's population, given the trend towards urban migration, sedentarization, and population growth. New job opportunities related to the economic growth of the district should be encouraged, particularly the training of local health, veterinary, and marketing officers recruited directly from the district. Institutions empowering the local pastoralists need to be strengthed, both in political and economic arenas; pastoralists need to manage and control their own resources. Finally, efforts promoting environmental conservation need to be supported and expanded. The planting of acacia trees in the district by the private agencies Christian Childrens' Fund and InterAid is transforming desert towns such as Korr, offering shade, protection against wind, and most importantly firewood, the region's only fuel. Similarly, the piping of water to town residents is increasing their ability to cultivate supplementary gardens, as in Ngurunit.

Pastoral production is a complex and finely tuned adaptation to arid lands and is perhaps the only way a majority of people can survive in Marsabit District. Development efforts need to focus on improving the livestock economy, rather than work against it. Only in this way will efforts by the international donor community help people feed themselves in Africa's arid regions.

Notes

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1. The Marsabit Diocese includes Marsabit and Samburu Districts. Between 1954 and 1978, the Diocese established missions at Laisamis, Korr, Kargi, Loiyengalani, Marsabit town, Moyale, Maikona, North Horr, and Sololo, and in Samburu District at Archer's Post, Baragoi, Barsaloi, Lodokejek, Maralel, Morijo, South Horr, Suguta Marmar, and Wamba. Between 1963 and 1975, the AIC established a hospital at Gatab on Mt. Kulal and missions at Karare, Logologo, Marsabit town and Ngurunit.

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