This paper argues, on the basis of a specific case of a pastoral economy in northern Kenya, that customary natural resource management rules and institutions may provide a better starting point for development policies and programmes than the more familiar technocratic/bureaucratic model hitherto adopted in African drylands.¹

Stephen Sandford [1983:11-19] has described a ‘mainstream’ view about pastoral development, held by a majority of those professionally concerned with arid lands, especially officials in governments and international organisations (Sandford includes academics, but it is my impression that the academic consensus is now different). This view holds that: (i) most of the world’s rangelands are suffering from desertification; (ii) in most cases the cause is overgrazing by domestic animals, caused mainly by an increase in the number of animals; (iii) the technology is available to combat desertification, but is not applied mainly because traditional economic and social systems of pastoralists, and especially systems of land tenure and the social systems which accompany them, militate against this; (iv) the solution is a combination of new organisational models, especially involving privatised tenure, such as commercial ranches or grazing blocks, where pasture use follows scientific advice about stocking levels and grazing rotation, implemented through a centralised bureaucratic organisation.

The record of this type of policy in Africa has been dismal, as any review of livestock projects shows. Land degradation, where it is taking place, has not been halted and has sometimes increased, livestock productivity has not grown although economic inequality has, and vulnerability to food insecurity and loss of tenure rights has increased. Faced with the failure of their policies, many major donors have stopped investing in livestock projects, and some now argue for a policy of benign neglect towards the dry areas on the grounds that little can be done there.

¹ The work reported in this paper was conducted as part of the Isiolo Livestock Development Project (ILDP), itself a part of the Embu-Meru-Isiolo (EMI) Arid and Semi-Arid Land programme, funded by the Kenya government and the UK Overseas Development Administration. Fieldwork was carried out by the socio-economic team of the ILDP project team, led by Abdi Umar and Galgalo, whose important contribution is acknowledged here. Thanks are also due to Jim Sweet and Jim Macaffrey. Full results of the work are reported in Swift and Umar 1991.

During this same period, anthropologists and others have documented the rich array of customary institutions regulating resource use in African pastoral societies. However, there have been few attempts to base modern policies of resource conservation and management on customary ways of doing things. There are clearly many difficulties in doing this, but the failure of alternative policies suggests at least that this option should be tried.

In this paper I outline the potential for this sort of approach in the case of the Boran pastoralists of Isiolo district in northern Kenya. I focus in particular on the issue of whether Boran customary organisations and rules exist which could contribute to new types of natural resource development policy.

Isiolo district

Isiolo, one of Kenya’s arid and semi-arid districts, has a population of around 50,000 people, not counting a substantial population of Somali pastoralists who move in and out of the district depending on relations with the local administration. Of the more permanent inhabitants, about 20,000 people are urban; the rest are pastoral or agropastoral producers. Boran pastoralists make up the single most important group, and constitute, in the absence of the Somalis, well over half the district population.

Rural production systems

The rural population is divided into three main production systems: the Waso pastoral production system based on the flood plain of the Ewaso Nyiro river, and comprising about half of the rural population of the district; the charri pastoral production system based in the dry scrubland away from the river; and the agropastoral system based at small irrigation schemes along the river, combined with smallstock herding. The charri and agropastoral systems contain approximately equal numbers of people, together making up the other half of the total rural population of the district. Beyond the Waso and the charri are extensive grazing areas mainly used by Boran and the Somali herdsmen in the wet season. In addition to these rural populations, many inhabitants of Isiolo town and other small towns in the district have substantial herding interests.
Most Boran pastoral and agropastoral households in Isiolo live in camps, which are capable of being moved, although most moves are over quite modest distances. In the Waso pastoral system, the average camp contains about seven households and 36 people, and the great majority of camps have ten or fewer households. In the charri pastoral system average camp size is very similar; camps in the agropastoral system are slightly smaller.

Average household size is 5.1 people in the Waso, 4.4 in the charri and 4.3 in the agropastoral system. Rural population density is about two people/km² in the two pastoral systems, and double that in the agropastoral system.

Poverty

The development priorities identified by herders, and their participation in customary institutional mechanisms for natural resource management depend in part on their economic and social position within Boran society. Poverty in a pastoral society is an important determinant of development perceptions.

Boran households may become poor as a result of a lack of herding skills, or as a result of a variety of contingencies, of which the secessionist shifia war of the 1960s and several subsequent droughts have been the most important in recent decades. There are four main overlapping categories of poor household in Boran society — the completely stockless, those on the edge of the pastoral economy, households headed by women, and households at vulnerable stages in their life cycles — and an attempt was made to quantify the most important of these.

In all three production systems there is a wide divergence between the wealthiest and the poorest households. In the two pastoral systems the richest households (under a quarter of all households) hold over half the livestock, while at the other end of the scale the poorest households (40-45 per cent of the total) hold only 10-14 per cent of all livestock. In the agropastoral system, 65 per cent of households fall into the poorest group, but hold less than a quarter of the livestock. In each production system, the average household herd in the wealthiest two ranks (out of six) is about ten times the size of that in the poorest two ranks. On average, Waso pastoral households are richest, agropastoral households poorest, with charri pastoral households in the middle.

The conclusion is that although households in all three production systems are, on average, comparatively poor, there are nevertheless considerable inequalities in livestock distribution, with a small proportion of households in each system quite well off, and much larger numbers of households in poverty. Using the Boran concept of a minimum herd (around five Tropical Livestock Units per household), it is estimated that about 26 per cent of households overall are below the minimum viable herd level. Waso households are best off in this respect, agropastoral households worst off.

Unsurprisingly, female-headed households are commonest in the poorest wealth rank, where they make up between 30 and 40 per cent of all households.

Boran perceptions of problems

The research included a local problem-identification methodology, used in conjunction with the wealth ranking, in order to measure the perceptions of different economic and social groups about development priorities. A high degree of consensus emerged, based not on differences between production systems or geographic areas, or even gender, but on wealth.

In all three production systems, emphasis was put on livestock, although in different ways. Households in rich and middle wealth ranks emphasised problems of livestock management, especially provision of water, grazing control and livestock disease. Poor households, on the other hand, emphasised their lack of livestock and the need for restocking. Even poor groups in the agropastoral system were more concerned with livestock than with agriculture.

Respondents had detailed views about specific livestock interventions, including new water points and veterinary dips, animal disease control priorities, and non-livestock problems, such as school and the need for alternative employment opportunities. The problems identified by women were similar to those identified by men in the same wealth rank, but with greater emphasis on domestic water; women as heads of household also identified particular problems they faced resulting from their inability to participate fully in many arenas where important decisions were made.

In all proposed development interventions involving natural resources, Boran respondents felt strongly that management institutions must be clearly defined, and that these should be based where possible on customary Boran institutions. There have been previous failed attempts at imposing grazing blocks in the district, and herders know something about group ranches as they operate elsewhere in Kenya; there was unanimous agreement that these were not appropriate institutional models for natural resource management in Isiolo.

In the light of these results, the question becomes: do customary models exist for the management of natural resources?

Customary Boran social and territorial organisation

Isiolo Boran society is organised along two main axes
of kinship (especially the clan system) and geography (especially the neighbourhood system); both these are still important daily forces in the lives of Isiolo herders today.2

Clans and the redistribution of livestock

Isiolo Boran are divided into Boran Guttu, themselves subdivided into two endogamous moieties or groups containing about 14 clans, and Sakuye, who have no moiety system and constitute about 12 clans. Boran clans meet regularly to decide on matters of common interest. Clans have elected leaders, jalaba, with limited decision-making powers but an extensive capacity for mediation and conciliation.

Boran clans do not have natural resource management functions as such, and indeed the way Boran camps are constituted and manage their livestock, described below, militates against such a role. However, Boran clans do have one key function relating to resources. This concerns the redistribution of livestock.

As is the case in all pastoral societies, animals are a key production resource for the Boran, and are subject to complex rules of ownership. Households acquire animals by a combination of preinheritance, and gifts, as well as through purchase and exchange. But there is a crucial set of circumstances in which clans themselves redistribute livestock within the clan in an effort to reestablish the viability of households whose animals have fallen below the minimum herd.

The periodic meeting of the council of each patrilineage discusses the situation of such poor households within the patrilineage. Those who are considered deserving — that is, who have not squandered their animals, but have lost them through disease or other unavoidable catastrophe — are identified as recipients of animals, and individual rich households are identified as donors. A detailed list of donors and recipients is drawn up, together with their contributions, and after full discussion the meeting takes a formal decision to redistribute those animals from rich to poor households. Clearly the present general impoverishment of Isiolo Boran society has made such clan-based animal redistribution more difficult, since there are far fewer rich and many more poor households, but the principle is still followed by most clans.

As reported above, the main development priority of poor households emerging from a detailed survey was for restocking, to enable poor households to resume a full-time pastoral production enterprise. Restocking and credit projects have not been particularly successful among pastoralists in many parts of Africa, although the need for them is clear. The existence of a well-established customary redistribution system targeted at poor households among the Boran makes feasible new ways of undertaking such restocking, by targeting credit or animals at lineages through their councils of elders, rather than directly to households. This shifts the considerable administrative costs (a difficulty with all restocking schemes) onto the recipients, and suggests a potentially fertile way of rethinking restocking policy.

Spatial organisation and natural resource management

The most basic Boran production unit is a household within a camp. Decisions about livestock management are made by the household head, often in consultation with other livestock owners in the camp. Within a camp, household heads are generally related through descent in the male line, or through marriage. Camps usually contain representatives of several clans. There is no position of camp chief with executive powers, and all adult male household heads attend key meetings. When livestock are scarce, all the milk cattle of a camp may be grazed together as a single hawicha milk herd; dry or fora herds from the camp are also managed as a single unit, often joined together with the dry herds of other camps for protection and companionship. Camps move with variable frequency and distance. Milk herds in general stay close to the camp while dry herds may move far away, especially in the rains.

Most Isiolo Boran recognise as a unit the group of people (perhaps 1-12 camps) normally inhabiting a particular local dry season area (known as arda) with well defined geographic limits. Although not a formal institution, arda members meet regularly to discuss matters of common concern, including questions of natural resource use and management.

The largest recognisable unit of resource management in Isiolo Boran society is the neighbourhood or deda, which groups together a number of arda. Deda are quite stable geographic areas, well-understood by the Boran and respected by herders as traditional resource management units. Deda members meet regularly and often coordinate their dry herd movements. Deda meetings take decisions by consensus, and although respected elders are listened to with special attention, any herd owner can speak.

Not all of Isiolo district is divided into deda; most of the areas bordering other districts are used as wet season grazing areas by the inhabitants of several deda and by pastoralists from neighbouring districts. Boran rules about natural resource management are not applied with such rigour in these wet season areas, and conflicts over grazing and water use are common. Deda correspond in some cases quite closely to

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2 Isiolo Boran society has been described in some detail in the work of Dahl [1979] Dahl and Sandford [1978], and Hogg [1981], on which the following summary description is based.
administrative sub-locations, in other cases less well. Some categories of water points are also subject to collective management, with detailed rules of ownership and use, management committees and office holders delegated to oversee orderly watering. This is particularly effective in the case of seasonal and permanent wells and boreholes; it used to be true of pans and dams, but is no longer. In effect this means that watering at the former type of water point is well controlled, and that the use of pasture served by such water points is managed through the watering committee and through the more general discussions at the deda committee. In addition to this, important grazing reserves for milk herds only are maintained around all the primary schools in the district.

The development priorities of rich and middle households, reported earlier, were mainly focused on new sources of water, on better control of grazing, and on other questions of livestock management including animal disease; a key concern about all of these was how they were to be managed. As the discussion in this section shows, there are customary Boran institutions performing some of these roles already, which could provide a starting point for institutional innovation to this end. It is not necessary to design entirely new institutions to do this.

Conclusions

These findings do not provide an answer to the problem of how to design institutions to manage natural resources, but they do suggest a starting point very different from that adopted in many natural resource management policies. That starting point is the customary institutions already operating in the society concerned.

In some places, such customary institutions will not exist or will have been transformed beyond usefulness; in others they may be in the hands of small unrepresentative groups. But in many cases, perhaps more than we imagine, there are existing customary institutions performing the same sort of role as that outlined above in the case of the Boran. In this case the task becomes easier: it is to provide the framework and incentives to enable such institutions to function more effectively and to evolve in desirable ways. This probably means providing statutory support and a contemporary legal framework to facilitate conflict resolution. In some cases it will be important to encourage a movement towards greater representivity (especially in the Boran case by including women in decision-making meetings).

The way in which this might evolve is suggested by the hybrid (part customary, part statutory) institutions which already exist in Isiolo, especially the school committees (which among other things regulate school grazing reserves) and the borehole committees (which manage water access and grazing around boreholes). These are statutory committees operating effective natural resource management on the basis of customary Boran procedures and rules; as such they provide one model of how more effective natural resource management can be achieved in places like Isiolo.3

1 Hogg [1990] has made comparable proposals to use some aspects of customary Boran institutions as the basis for development organisation in Ethiopia.

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