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ENCLOSURE OF THE EAST AFRICAN RANGELANDS:

RECENT TRENDS AND THEIR IMPACT

by

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I INTRODUCTION

The enclosure of rangelands and registration of exclusive rights to grazing by individuals or groups of pastoralists has been increasing over the past two decades. This occurs because of pressure from two levels:

- a) It is encouraged by governments, planners and multi-lateral donor agencies in an attempt to 'rationalise' the use of rangelands. This arises from a wish to see the pastoral sector move towards more market-oriented production and make a greater overall contribution to the national economy;
- b) It is initiated by pastoralists as a response to a perception that good land is becoming scarce and there is a need to lay claims to a demarcated area in order to protect grazing rights.

This paper analyses briefly the reasons why such enclosure is taking place, the short and the long term impact on different groups, and the technical and environmental issues which are related to enclosure. Examples are given from Kenya and Somalia which are intended to raise some of the fundamental issues involved and to provide a basis for discussion about the future evolution of pastoralism in Africa. In Kenya, some evidence on wealth stratification which has arisen out of the planned sedentarisation of pastoralists on group ranches is presented. In Somalia, spontaneous enclosure in pastoral and agro-pastoral areas is examined. Neither is intended as an academic treatment of the subject, nor is this in any way a comprehensive analysis since the country-to-country differences are great and empirical information scarce.

II GOVERNMENT PRIORITIES

Governments, having as one of their main tasks the integration of, and control over the state, tend to be concerned about the lack of control which they have over their pastoral populations. Usually pastoralists are highly mobile, difficult to tax, ignorant or contemptuous of national borders, and have their own ways of settling disputes. There is therefore a feeling among government officials and planners that sedentarisation of pastoralists is desirable. In this way centralised

control can be increased, taxes can be levied, herd sizes can be limited in line with some ideal of a pre-determined 'carrying capacity', and herders encouraged to commercialise their production. This line of reasoning is justified by the argument that the pastoral areas are experiencing a crisis in terms of overpopulation (both animals and people) and overgrazing (i.e. more animals than the land can sustain without permanent damage); producers are 'backward' because of their apparent failure to respond to price incentives; and it is time for people to take individual responsibility for limiting their herd sizes. Sedentarisation is thought to make it easier for the state to provide services such as health care and education. It is therefore viewed as a necessary pre-condition for 'development'.

In Kenya during the 1960s, pastoralists were encouraged to register land individually and become commercial beef ranchers. This option was taken up by those who had the capital and inclination to settle. It soon became clear, however, that this was not a solution for the majority, since the amount of land needed to make each ranch viable was large and there would not be enough land to go round.

Group ranches were then tried, but these have met with many problems. The legislation which was passed to allow a group of people jointly to own a piece of rangeland was ambiguous and unwieldy, and in practice, decision-making did not involve the whole group but only the more powerful members. The first ranches, in Kajiado district, were often badly adjudicated so that they did not contain year-round grazing within the ranch boundaries, forcing the ranchers to move their herds off the ranch for periods of the year. This in turn gave herders little incentive to limit the size of their herds. Fencing of the ranches was not allowed because they straddled the main game migration route from the Serengetti to the Tsavo and Amboselli national parks, and the foreign exchange earned by tourists visiting these parks was too precious to be sacrificed. Maasai cattle were therefore competing with game for grazing, and dying of malignant catarrah, carried by wildebeest. The allocation of land into designated group ranches led to increased grazing pressure on common land and confusion about access.

A case study of one Maasai group ranch (Graham, 1983) has shown that between 1969 when the ranch was established, and 1983, wealth (indicated by livestock ownership) has been polarised in an alarming manner. A sample of ranch membership chosen to represent a range of livestock wealth holdings (n=15, or 50% of total membership) found that the period between 1969 and 1983 saw an average increase of 71% in the wealth of the top 5. Fifty per cent of the total stock units owned by the sample were, by 1983, concentrated in the hands of 3 individuals; the same 3 individuals had owned only 30% of the stock units in 1969. Moreover, as Table 1 shows, the middle wealth group of the sample had virtually disappeared in the 1983 census; wealth had either increased or decreased markedly from the 1969 figures.

Table 1: Distribution of Total Stock Units (SU) Among 15 Sample Households

<u>Households</u>	<u>\bar{X} 1969 SU</u>	<u>\bar{X} 1983 SU</u>
Richest 8	99	156
Range	70 - 135	78 - 282
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Poorest 7	41	25
Range	31 - 59	11 - 39
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Mean	70	91
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This evidence would appear to suggest that the group ranch approach, as tried in Kenya, is beneficial to those who are already economically and politically in a strong enough position to exploit it. The precise reasons why this is so are complex and seem to relate, in this case, to better access to herd management inputs (e.g. acaracide, connections to the water pipeline, veterinary drugs) by those with capital, combined with an increased reluctance on the part of the rich to share limited grazing. A spirit of capitalism seems to have displaced the formerly far more egalitarian outlook of the Maasai.

This case study also shows the link between wealth gains and membership of the ranch committee, responsible for all day-to-day management decisions: a marriage of economic and political interests.

There is now a strong move towards sub-division on this and other ranches. Predictably, on Poka ranch, the push is from this political and economic elite, whose interests now lie in a permanent consolidation of their position.

One of the big dangers inherent in the registration of rangeland is that the land itself becomes a commodity; when times are hard, as they invariably are from time to time in marginal areas, the land title can be sold. In this way large areas of land in Kenya are being permanently transferred from pastoralists to others. This is especially true of the better land which is suitable for dryland farming but which previously furnished critical dry season grazing for the more marginal areas. Many of the Maasai who are selling their land in this way do not fully realise the implications of what they are doing, and do not equate a sale documented by a piece of paper with the loss of grazing rights for their herds.

If sedentarisation is to be successful, technical interventions will have to be made to allow a more intensive use of range resources. But 'carrying capacity' is a difficult concept to make operational: it is not simply a technical relationship between biological yield and animal feed requirements, but rather depends on a complex web of economic, social and environmental factors which include availability of labour and the herding strategies which this allows, herd composition, extent of mobility, intensity of seasonal grazing pressures etc. A major problem with trying to determine a fixed carrying capacity for a section of rangeland is that rainfall in rangeland areas is usually highly erratic. It fluctuates widely both in intensity and in area. If a carrying capacity is calculated using average rainfall, it is therefore almost certainly not valid for most years.

Sedentarisation schemes such as those described above are attractive to governments because through them they can dictate, orchestrate and

control the whole process of pastoral development. Channels for credit and technical innovation are opened, and the stage is set for commercialisation. Pastoral production, from the perspective of central government staff, can be reduced to a series of technical equations with a quantifiable economic outcome. To planners and technicians, group or co-operative ranches seem to offer a method for rationalising rangeland production according to scientific criteria. However, it is important to recognise that the approach is largely based on an illusionary notion, and that 'carrying capacity', while offering an attractive tool of analysis to planners, may be a dangerous weapon in the battle for control of the rangelands.

III PASTORALISTS' PRIORITIES

The rationale of pastoral nomadism is that the individual herder accumulates as large and diversified a livestock holding as possible in order to be left, after periodic droughts, with enough animals for family subsistence. The basis of this system is that each herder retains the flexibility to move his or her animals to where rains have fallen and produced grass or browse. In the lower rainfall areas, pastures are seasonally grazed and there is no guarantee that an enclosure will receive sufficient rainfall in any one year to produce sufficient grazing for a herd. By becoming sedentary, a herder thus loses the flexibility upon which the efficiency of the traditional system was based.

As we have seen above, the pastoralists who are initially attracted to registering in group ranches are often something of an elite. They are generally the rich and powerful who are able to take advantage of the development package offered with the scheme. Their economic base is strong enough that they do not have to worry too much about the risks involved, and their connections are widely enough spread that in the event of disaster they will suffer only minimally.

Spontaneous enclosure is taking place, and there are several precipitating factors behind this. Drought, resulting in a general scarcity of good grazing, can lead to a desire to lay claim to what

grazing still exists and exclude others from it. Overstocking of common rangelands has led to a decline in the quality and quantity of available grazing. Public borehole development and private investment in water development have made some areas of rangeland suddenly very attractive. Individuals have invested in constructing permanent houses. An increase in the commercial value of livestock has made intensification of production desirable. All these factors have contributed to an increase in spontaneous enclosure.

In places where enclosure has already started, it may acquire a strong momentum of its own as people rush to lay claim to an ever diminishing pool of common land. Once stakes are claimed and the principle of private ownership established, a crystallisation of ownership with all that implies for permanent access or denial of access to grazing takes place. Since in a pastoral system, land and water are the major means of production, this also has the effect of crystallising wealth (in the form of livestock) holdings and leads to a permanent division between rich and poor. Under these circumstances, where an enclosure movement has begun, even those who do not want to enclose are forced to do so in order to preserve some access to grazing.

In Somalia, spontaneous enclosure has been taking place in the northern region of Sanaag, and in the central region of Galgaduud. All rangeland in Somalia officially belongs to the state, and private ownership is therefore illegal. It is legal, however, to register farm land with the Ministry of Agriculture and to enclose this. In Ceerigabo district of Sanaag, a large area of plains is especially attractive to pastoralists because of the plant species which grow there. It provides important seasonal grazing for both the coastal herds which trek up to the cooler plains during the summer, and the escarpment herds when the weather gets cold. Co-operative ranches were established by the government in the late 1970s. The powerful were quick to take advantage of this and huge areas have been designated as being under the exclusive control of co-operatives which, although having many names on paper, may be dominated by very few. A sense of panic has resulted from this, and over the past few years much of the plain has been registered as farm land with the

Ministry of Agriculture (though it is unsuitable for agriculture) and enclosed by individuals. The rapidity with which this has occurred has obviously surprised many people, and as in other places, the belief that there would soon be no common grazing land left looks like being self-fulfilling. One result of this enclosure has been an increase in overgrazing of the steep slopes of the escarpment and severe gully erosion caused by the resulting accelerated run-off.

In Galgadud region, two districts are experiencing spontaneous enclosure movements (see PDN 25b and Behnke, 1986 for details). Much of the area is cultivable if not too intensively used, and a form of agro-pastoralism has been practiced for nearly two hundred years. This has generally taken the form of shifting cultivation although where it has been too intensive sand dunes have formed and are now a major problem. Fifteen to twenty years ago, several borewells with diesel pumps were dug and the sudden availability of water made the option to settle and practice a more intensive form of agro-pastoralism very attractive. Land was rapidly enclosed with thorn fencing in the vicinity of these wells and herds kept close to the farms for much of the year. This created a land shortage close to permanent water and the whole area was soon fenced. According to Behnke, local people say that there was, even up to 1985, enough cultivable land for everyone, but the panic caused by the perceived shortage led people to enclose huge fallow areas which are kept as grazing reserves for the future. Commercial operators, engaged in livestock fattening operations, have in particular been responsible for some of the larger enclosures. In the areas where there is no permanent water, dryland farming in a shifting form is still being practiced. Each plot can only be cultivated for a few years, but the tendency has been to then enclose the contiguous piece of land, leaving the original plot still enclosed. This has led to strips of enclosures, some of them 20-30km long, to which public access is denied. Some of the land is used for fodder crops, some for private grazing reserves, and some is simply allowed to regenerate. Thorn fencing is now preventing those who are still dependent on common rangelands from gaining sufficient access to grazing and water, and tempers are running high. Fence burning and other forms of retaliation are becoming common.

In Somalia, the move to privatise common pasture should be seen in the light of a general weakening of collective forms of responsibility. With the development of trade, transport networks, industry etc. as well as increased access to education, there is a perceptible move away from purely subsistence production towards a market orientation. Increasingly, paid labourers are used for such tasks as well-digging, herding and watering of stock, formerly undertaken on a communal or reciprocal basis. More money is coming into the pastoral economy from remittances, often quite large amounts of money from abroad. This is being invested in animals, creating and strengthening economic and commercial ties with the rangelands. Money is therefore available as never before to pay for services. Privatisation of land may be seen as a natural corollary to this process.

The main costs of privatisation and enclosure of rangelands are being born by those pastoralists who are excluded from enclosures. They find their access to grazing and water is restricted. Since it is usually the best and most productive land which is enclosed first, they find themselves and their herds pushed onto more and more marginal and degraded land. Eventually their reduced access and increased vulnerability may force them out of the system completely, dealt a fatal blow by drought or disaster which affects the rich and secure less dramatically.

Enclosure can therefore be expected to produce large numbers of dispossessed people whose future will depend on the ability of the economy to absorb a new labour force. Some will continue herding other peoples' animals, while others will migrate to the towns in search of alternative employment.

The stratification of pastoralists in terms of wealth, traditionally recognised as fluid and non-permanent, is crystallising through the allocation of permanent access to vital resources for some, and the permanent exclusion of others. The social tension thus created may be expected to increase.

IV CONCLUSION

At present, the current situation in most places is less clear cut than presented above. There is much semi-nomadism associated with both planned and spontaneous enclosure, and reciprocal social relations still allow significant access by those excluded to the enclosed areas. For example, it is common among Somalis that those with enclosures still maintain their animals on the open range, while using their private land for production of fodder crops or for dry-season grazing. This puts tremendous pressure on the grazing resources of the open range and accelerates the rate of degradation, which in turn accelerates the rate of enclosure. At the same time, those with private enclosures are under strong family pressures to allow access to other family members who do not have private land.

The beneficiaries of enclosures are the national governments which control them and the richer pastoralists who ally themselves with the state and gain power and influence through their increased access to resources. The losers are the poorer pastoralists, pushed further and further onto marginal land, and eventually out of pastoral production completely.

The process is thus an inherently political one, since it concerns questions of access to and control over resources. Although as yet affecting a relatively small number of people, it is a growing and important trend with far-reaching implications for the future of nomadic pastoralism. Many questions are still unanswered. Is it reversible? If not, how can it be controlled to safeguard the interests of the weakest? Are in fact large-scale commercial livestock operations a more efficient use of productive resources than nomadic pastoral production? What capacity does the national economy have for absorbing large numbers of displaced people? Since at present the process is poorly documented and ill-understood, attention must be paid in the future to monitoring it and analysing all its implications.

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